



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>







D. Scott

PROCEEDINGS

OF THE

TENTH ANNUAL MEETING

OF THE

North Central Association

OF

COLLEGES AND SECONDARY SCHOOLS

Held at

Chicago, Illinois, March 31, April 1, 1905

EDITED BY

JOSEPH VILLIERS DENNEY

SECRETARY OF THE ASSOCIATION

COLUMBUS, OHIO
PUBLISHED BY THE ASSOCIATION
1905

11

PROCEEDINGS

OF THE

TENTH ANNUAL MEETING

OF THE

North Central Association

OF

COLLEGES AND SECONDARY SCHOOLS

Held at

Chicago, Illinois, March 31, April 1, 1905

EDITED BY
JOSEPH VILLIERS DENNEY
SECRETARY OF THE ASSOCIATION

COLUMBUS, OHIO
PUBLISHED BY THE ASSOCIATION
1905

Wm. T. Scott

401509

Copies of the Proceedings of the North Central Association of Colleges and Secondary Schools may be obtained by addressing the Treasurer of the Association, Mr. J. E. Armstrong, Englewood High School, Chicago. The price of single copies is twenty-five cents. The price of the complete set as far as published (eleven numbers, including the report of the Preliminary Meeting for Organization) is \$2.50.

The next meeting of the Association will be held in Chicago, Friday and Saturday, March 30 and 31, 1906.

THE CHAMPLIN PRINTING CO.
COLLEGE PRINTERS
COLUMBUS, O.

The North Central Association
or
Colleges and Secondary Schools.

Tenth Annual Meeting, Chicago, March 31, April 1, 1905.

The tenth annual meeting of the North Central Association of Colleges and Secondary Schools was held in Chicago, Friday and Saturday, March 31 and April 1, 1905.

First Session, Friday, March 31, 1905.

The Association was called to order at 10 o'clock a. m. in the Banqueting Hall of the Auditorium Hotel by the President, Frederick L. Bliss, Principal of the Detroit University School, Detroit, Michigan.

President Bliss delivered the annual address, as follows:

PRESIDENT'S ADDRESS

**PRINCIPAL FREDERICK L. BLISS, DETROIT UNIVERSITY
SCHOOL.**

HISTORICAL SKETCH.

On this, the tenth annual meeting of the North Central Association of Colleges and Secondary Schools, it seems fitting that a brief summary of the history and work of the association be made.

At the meeting of the Michigan Schoolmasters' Club in March, 1894, a committee was appointed to investigate and report upon the subject of secondary school work throughout the United States. The work of the committee was subdivided and partial reports were presented at the meeting held at Ypsilanti, December 1, 1894. The reports served only to emphasize the varied standards of different parts of the country, both in the colleges and in secondary schools, and certain phases of the meeting served also to emphasize the failure of both school and college men to grasp each others point of view. That the work of the Michigan Schoolmasters' Club, and that of Eastern associations in narrowing the gap between school and college might be extended to the middle west, Principal W. N. Butts of the Michigan Military Academy, now of the University of Michigan, introduced a resolution providing that the presidents of the University of Michigan, the University of Wisconsin, Northwestern University, and the University of Chicago, be asked to unite with a committee of the club in issuing a call for a meeting to form an association of schools and colleges in the North Central States. In accordance with the resolution then adopted, the call was issued, and on the morning of Friday, March 29, 1895, representatives of leading Universities, Colleges and Schools in Ohio, Michigan, Indiana, Illinois, Wisconsin, Iowa and Missouri met at Northwestern University for the purpose of establishing the proposed association. The general interest in the movement was shown by the attendance at this preliminary meeting. There were thirty-six authorized delegates present, representing institutions in seven

states. It is an interesting fact that the presidents of the state universities of the seven states represented were all present in person at this meeting. The ten years that have passed since that meeting have been fruitful of results in the educational world. So rapid has been the march of progress that it is doubtful whether many realize what the actual situation was ten years ago.

The report of the Committee of Ten on Secondary School Studies had been published only the year before. The Joint Committee on Uniform Requirements in English was just beginning its work. It was not until the following summer that the Committee on College Entrance Requirements was appointed by the Departments of Secondary Education and of Higher Education of the National Education Association, and it was four years later that this Committee's final report was presented and published. It was in 1896 that the American Historical Association appointed the Committee of Seven, whose report has practically revolutionized the history courses in most Secondary Schools.

The College Board for entrance examinations was established by the Association of the Middle States and Maryland in May 1900, and their pamphlet of definition of units, if it may be so described, was first published in January, 1902. Of course the present Commission on Accredited Schools of this association was not yet dreamed of.

These facts remind us how little had been done before the birth of this association, and how much has been done since tending toward our great purpose of mutual understanding and sympathy between

schools and colleges. It is interesting to note that at the preliminary meeting at Evanston a resolution was adopted asking that the Executive Committee submit for discussion at the first annual meeting the questions "What constitutes a Secondary School?" and "What constitutes a College?" Ten years have not entirely answered these questions, but substantial progress has been made.

The first regular meeting of the association was held at the University of Chicago, April 3 and 4, 1896, with President Angell in the chair. The question recommended at the former meeting was discussed, but little progress was made toward a satisfactory definition of school or college. Possibly the two institutions cannot be exactly defined. President Jesse's definition presented at this meeting is as close an approach to a satisfactory definition as has yet been made. The unanimous adoption of the following resolution proposed by President Rogers was the first definite act of this association tending toward the establishment of standards: "Resolved, That, in the opinion of this association, no College is considered in good standing that confers the degree of Doctor of Philosophy or Doctor of Science, except after a period of at least two years of residence and of graduate study." and "Resolved, That no College not in good standing under the above resolution is eligible to membership in this association."

The second annual meeting was held at Lewis Institute, February 12 and 13, 1897, with President Adams of Wisconsin, presiding. It was pre-eminently a meeting of discussion rather than of action, but the whole discussion served to narrow the gulf

between the college man and the school man. The association took decided action against the practice now rapidly disappearing of introducing a multiplicity of short single term courses in secondary schools, and also against the appointment by colleges of inexperienced teachers for Freshmen. The question as to the proper content of the secondary course was vigorously discussed and finally thrown over to the next meeting for action.

The third annual meeting was held at the Auditorium Hotel, and was presided over by President Canfield of Ohio State University. Important amendments to the constitution were adopted at this meeting. One of these excludes from membership any college or university whose requirements for admission represent less than four years' secondary work, and any that confer the degree of Ph. D., or Sc. D., except after two years of residence and graduate study, and another amendment excludes secondary schools which do not have a four years' course of study.

This meeting is of especial importance because of the introduction of the resolution "That a uniform minimum requirement be established for admission to any and all courses in the colleges and universities of this association." The resolution which specified, further, certain prescribed constants, provoked one of the most important discussions in the history of the association. The result was the adoption of a resolution of President Rodgers of Northwestern University, with an amendment by President Draper of the University of Illinois, providing that separate commissions be appointed to formulate entrance re-

quirements in each of the ordinary accepted subjects, each commission to include five college men, and five secondary school men. Owing to a misunderstanding, these commissions were never appointed, but the movement then begun reached definite results at the meeting of 1901, in the establishment of the Commission on Accredited Schools.

The fourth resolution of the previous meeting was discussed at length and disposed of by the adoption of the substitute proposed by Dr. Nightingale. The resolution favored much freedom of election in secondary school work.

The fourth annual meeting was held at the Auditorium Hotel, March 31 and April 1, 1899, with Dr. Nightingale in the chair. The proposed amendment excluding individual membership in the association was debated and failed of adoption. Might it now be well to refer this whole matter of membership in the association to a special committee to report at the next annual meeting? The present plan is certainly illogical, although that is no necessary objection to it. It has recently been urged that the election of certain members of college faculties to membership when others are not thus elected, carries with it the unfortunate assumption that those not finally elected are unwelcome at the meetings of the association. In other words, without intention, there is an odious discrimination on the part of the association. If this feeling exists, it is unfortunate. May not some compromise plan of membership be devised by a committee which will secure the co-operation of all heretofore identified with the association and maintain a proper balance between sec-

ondary and higher education, at the same time abolishing some of the possible objections to the present plan? While making this suggestion, I am in hearty accord with the idea advanced two years ago by Director Carman, that the actual membership should be limited in numbers, and that this body should continue a working and not a mere talking organization.

The meeting otherwise was devoted to interesting discussions, but was without formal action.

The fifth meeting was held in St. Louis, March 30 and 31, 1900, with President Slocum in the chair. As the result of a paper by President Rogers, of which, unfortunately, no report has been preserved, a committee was appointed under the chairmanship of President Baker to consider college entrance requirements. This committee reported with certain specific recommendations as to minimum requirements, but especially urged the appointment of the commission provided for by resolution at the meeting of 1898, but never appointed.

The sixth annual meeting was held at the usual place in Chicago, March 29 and 30, 1901, with Mr. Aiton of Minnesota, as President of the association.

Dean S. A. Forbes of the University of Illinois, in a valuable paper, proposed "a general standing committee" on college entrance requirements, and on motion of Professor C. A. Waldo of Purdue University, a committee was appointed to consider and report on the recommendation.

The committee, which consisted of Dean Forbes, President Cady Staley, President W. R. Harper,

Principal C. G.. Ballou and Professor Stanley Coulter, recommended the establishment of a permanent Commission on Accredited Schools, and stated the duties of the proposed commission to be "To define and describe unit courses of study; to serve as a standing committee on uniformity of admission requirements; to secure uniformity and economy in the work of high school inspection; to prepare a list of high schools entitled to the accredited relationship; and to formulate standards for assignment of college credit for good high school work done in advance of the college entrance requirements."

The report was adopted and the Commission was appointed at the close of the meeting.

The seventh meeting of the association was held at Cleveland, March 28 and 29, 1902. The important feature of this meeting was the first report of the Commission on Accredited Schools. The report was adopted, and this adoption can not but be regarded as making an era in the educational history of the North Central States. The report defined a unit course of study as "a course covering a school year of not less than thirty-five weeks, with four or five periods of at least forty-five minutes each per week." It recommended that entrance requirements should include fifteen units, and that all such requirements should include as constants three units of English and two of mathematics. The report also included a fairly complete definition of units in particular subjects. The policy of the commission was to adopt as far as possible units already recognized by other associations, thus aiding the cause for which in large part it was established, the bringing something like order out of

the chaos of college requirements, and the cementing still further the growing union of effort on the part of colleges and secondary schools.

The eighth meeting held at Chicago, April 3 and 4, 1903, still further emphasized the value of the work of the Commission. The definitions adopted at the Cleveland meeting were supplemented and somewhat modified. It was reported that the Ohio Legislature had adopted certain features of the commission's work in classifying the high schools of the state. Other features of the meeting were a discussion of the influence of Higher Commercial Education, and the adoption of the report of the Committee on Athletics.

The ninth annual meeting held March 25 and 26, 1904, again showed the importance of the work of the Commission. The Board of Inspection for the Commission through Chairman Whitney, presented an extremely important report, including a list of accredited schools, and formulating suggestions as to the utilization by the board of existing agencies of inspection. The report was adopted by the association. An important communication from Secretary Fiske of the College Entrance Examination Board was presented to the association, asking that it co-operate with the board by appointing a representative or representatives to membership on the Board. The discussion following emphasized the almost unanimous preference for the certificate or accrediting system, but it was nevertheless voted to co-operate with the Examination Board. It should seem that the work of the Board is really entirely in harmony with the spirit of the association's work. Most of the eastern institutions represented on the Board

accept certificates. The recent organization of the New England College Entrance Certificate Board by New England Colleges emphasizes their belief in the certificate system, when properly regulated; but college entrance examinations must nevertheless continue. All secondary schools of proper standards refuse certificates to some students who might possibly profit by college work. The colleges do not refuse to examine them, and often admit them. Is it not better that there shall be unity in such examinations, that common standards shall be accepted, than it is that there shall be laxity of standard or unreasonableness of standard on the part of certain institutions? The units accepted by this association conform almost exactly to the standards of the College Board. These standards are having a marked influence upon the requirements of eastern colleges. I feel that the cause of orderliness in educational matters would be greatly advanced if the higher institutions of this association all became associated actively with the work of the College board. Cornell and other eastern colleges have dropped their own June examinations. These colleges receive certificates, but they co-operate also fully with the work of the board.

I am led to call attention here to an interesting fact in the history of our own commission. I have referred before to the resolution adopted at the meeting of 1898, providing for the formation of a commission or a board of commissions. No action was taken, but the commission proposed was not a commission on accredited schools, but was really designed to be a college entrance examination board for the North Central States. The discussion of the subject

brought out many differences of opinion as to details, but the idea that an examining commission was inconsistent with a certificate system found no advocate. Out of the movement then to establish a college examination commission has grown our present Commission on Accredited Schools. The discussion last year on the invitation of the College Entrance Examination Board, showed that many felt that co-operation with that Board was a menace to the accrediting system. I cannot so regard it. I thoroughly believe that were the work of this Board extended westward or were this association to establish a board of its own to co-operate with the commission, the standards of education would be materially strengthened. No one can more strongly appreciate the evils of college examination ridden schools. But the properly prepared examinations, those prepared by a commission especially, are suggestive to teachers, and may be made of the greatest value by mere suggestion in raising the standard of work in the secondary schools. It is agreed that if a subject is taught at all it should be taught alike to those going to college and to those not to go. It is certainly true that any subject should be studied with equal thoroughness by both. If the colleges of this association would co-operate in a plan of uniform examinations upon our already recognized units and were to publish and widely distribute these questions annually, they would do more to set standards for multitudes of schools than can possibly be done alone by any practicable system of inspection.

If, too, the colleges would spread entrance examinations over a period of three years, one of the

chief evils of the examination system would be removed. Years ago all candidates were examined in all subjects at the end of their course. The result was the establishment and maintenance of preparatory schools which devoted the last year to a cramming process just as genuinely educational as the methods of Dr. Blimber or of that other eminent exponent of cram Mr. Gradgrind. The evils of the system were perhaps mitigated when the colleges consented to preliminary and final examinations. But still the tendency is to make such institutions as are described in the Atlantic Monthly for September, 1904, under the subject of the Preparatory School. Were still another year given to these examinations and the subjects required in the earlier portion of the secondary course presented at this time, the evils of the exclusive examination system would be reduced to a minimum. The unwholesome "cram" forced where the examination system almost exclusively prevails would largely disappear, while the influence of the examination simply as a means of setting standards might be of much value to the secondary schools.

I thoroughly believe that the work of this association in the formation of the Commission on Accredited Schools is incomplete until it gives to that commission or to another commission the work of formulating annual examinations on the units the commission has defined, unless indeed by thorough co-operation with the College Examination Board this work may be unnecessary in the special section of this association.

Theoretically, the secondary schools and their teachers should determine their own methods of work and should be able to decide upon the proper content of their instruction. But practically, every man knows, and I should suppose that every college man would know, that in the secondary schools of these eleven states are hundreds or thousands of teachers every year with little or no experience and with very indefinite ideas as to standards. The colleges are sending out such every year in droves, and they are recommending them to the schools.

Those whose work has been in larger cities and in the stronger schools can hardly appreciate how largely the work in smaller schools is done by this class of teachers. They should be helped and guided. This is the work of their principal or their superintendent. But these are sadly overworked men. If, then, the teacher grasped the idea that the college preparatory standard of work in any subject and the standard for the non-college preparatory student must be alike, and if he had set before him numerous sets of wisely prepared questions, questions set to test knowledge, not ignorance, to test ability to do something well, not merely an ability to memorize facts, it could not but be an inspiration to a grade of work that is lacking in hundreds of our schools to-day. Thus we should have the strengthening influence of college examinations without the danger of work degenerating into mere cram, as the large majority of school graduates would still be admitted to college upon certificate.

Furthermore the tendency of the certificate system is to disorganize and lower the standard of

Principal C. G.. Ballou and Professor Stanley Coulter, recommended the establishment of a permanent Commission on Accredited Schools, and stated the duties of the proposed commission to be "To define and describe unit courses of study; to serve as a standing committee on uniformity of admission requirements; to secure uniformity and economy in the work of high school inspection; to prepare a list of high schools entitled to the accredited relationship; and to formulate standards for assignment of college credit for good high school work done in advance of the college entrance requirements."

The report was adopted and the Commission was appointed at the close of the meeting.

The seventh meeting of the association was held at Cleveland, March 28 and 29, 1902. The important feature of this meeting was the first report of the Commission on Accredited Schools. The report was adopted, and this adoption can not but be regarded as making an era in the educational history of the North Central States. The report defined a unit course of study as "a course covering a school year of not less than thirty-five weeks, with four or five periods of at least forty-five minutes each per week." It recommended that entrance requirements should include fifteen units, and that all such requirements should include as constants three units of English and two of mathematics. The report also included a fairly complete definition of units in particular subjects. The policy of the commission was to adopt as far as possible units already recognized by other associations, thus aiding the cause for which in large part it was established, the bringing something like order out of

the chaos of college requirements, and the cementing still further the growing union of effort on the part of colleges and secondary schools.

The eighth meeting held at Chicago, April 3 and 4, 1903, still further emphasized the value of the work of the Commission. The definitions adopted at the Cleveland meeting were supplemented and somewhat modified. It was reported that the Ohio Legislature had adopted certain features of the commission's work in classifying the high schools of the state. Other features of the meeting were a discussion of the influence of Higher Commercial Education, and the adoption of the report of the Committee on Athletics.

The ninth annual meeting held March 25 and 26, 1904, again showed the importance of the work of the Commission. The Board of Inspection for the Commission through Chairman Whitney, presented an extremely important report, including a list of accredited schools, and formulating suggestions as to the utilization by the board of existing agencies of inspection. The report was adopted by the association. An important communication from Secretary Fiske of the College Entrance Examination Board was presented to the association, asking that it co-operate with the board by appointing a representative or representatives to membership on the Board. The discussion following emphasized the almost unanimous preference for the certificate or accrediting system, but it was nevertheless voted to co-operate with the Examination Board. It should seem that the work of the Board is really entirely in harmony with the spirit of the association's work. Most of the eastern institutions represented on the Board

college examinations. Their importance is decreased as the number taking them decreases. Many a youth has been admitted to college as a result of this disorganization whom his former teacher would not certify and who could never have been admitted were he subjected to a genuine test of his preparation for college work.

The systematic organization of such examinations upon the various units already defined by this association would serve to strengthen the work of the schools, to raise the standard of work in the college freshman year, indirectly to unify still further the work of the schools, to secure a better understanding between the schools and the colleges, and to strengthen rather than to weaken the position of the certificate system. As a detail, it should be said that such examinations should be held at various points, perhaps at the colleges themselves, in September as well as in June, if the plan is to work most harmoniously with the certificate system.

Just one more suggestion. It frequently happens that an inspector visiting a school finds the work in general well done, but finds teaching weak in some one subject. The teacher may be a barnacle whom the principal or the superintendent has vainly tried to remove. As the system now generally works, a school is either accepted or rejected. (Criticism may remove the weak teacher, or it may not.) The college accepts the certificate of the school as a whole or not at all. Nothing could be more wholesome than the statement sent to the school authorities that the certificate of a school would be accepted in all subjects but the weakly taught one, and that candidates

must pass examinations in that subject. Some colleges now require examinations in certain subjects. Cornell accepts certificates in everything but English, in which an examination must be passed. Williams has for years required examinations in French and German, while in general accepting certificates. Why should not all colleges exercise this liberty of choice in the certificate privilege? With this modification, the elevating influence of the college on school standards would be enormously strengthened. The lazy or the careless teacher,—and few schools fail to have one such at times,—would be put upon his mettle. The timid principal, who under the present system might be tempted to conceal the work of such a teacher from the college inspector, would have every reason to expose the weakness, and secure the aid of the college in emphasizing the need of a change. The great merit of the certificate system has been to bring the schools and colleges into closer relations, and especially to make the influence of the state universities felt in every part of their states. While freedom must be left to the towns as to courses and requirements for graduations, it should always be the province of the state university as the head of the school system to exercise a guiding influence over the secondary schools of the state.

With the growing adoption of the plan of official inspectors who are not merely cloistered scholars, but who are men thoroughly cognizant of the needs and the limitations of secondary school work, this influence must become stronger and stronger. But the school principals and superintendents throughout the state ought to have the right to demand the aid

of such inspectors in holding up the work of their schools to a standard that makes for real culture and strengthening discipline.

What has just been said is in the nature of comment on the work of the ninth annual meeting of this association. To-day we complete the first ten years of an association life. We can look back with reasonable satisfaction upon the results thus far definitely achieved. But much work remains to be done. The important work of the Commission on Accredited Schools is but one branch of our proper activities. The association is not a legislative body but as an advisory body its influence in the future can be very great. It has been suggested that the schools have the right to know what may be an "accredited college," in other words what institution shall be deemed worthy the title of college or university at all. The subject is a difficult one and well worthy of study by a competent committee. There is urgent need of legislation in regulation of the granting of academic degrees by really fraudulent institutions. Not long ago I received an offer of a Ph. D. or an LL. D. degree for the payment of a very modest fee. The work of the committee on which President Rogers worked most zealously might well be renewed and strengthened.

Something has been done in an advisory way toward the regulation of inter-scholastic and inter-collegiate athletics, but much remains to be done. This association should be a potent influence for good in the struggle against the present demoralizing tendencies of organized sport.

But foremost in the various activities of the association should be all work that tends to a better understanding between the college and the secondary school. Each may learn something from the other. The ten years that are gone have brought the schools and colleges of these states very near to one another, and perhaps equally important, they have brought the institutions, both secondary and higher, or different states much nearer to one another. This broadening of our horizon enables us to see our neighbors' excellence, and by contrast shows us our own defects. Too much in the past, a Chinese wall of prejudice and often of self complacency followed the state boundary line. Much has been done here to break down the wall. It is hard to anticipate how much good to the states of this association will come from ten years more of the same earnest, quiet, unassuming labor, that have made the last decade fruitful of so much good.

The President then appointed the following committees:

(1) To recommend the time and place of the next meeting of the association: Principal E. W. Coy, Hughes High School, Cincinnati, Ohio; Professor F. N. Scott, University of Michigan; President C. F. Thwing, Western Reserve University; Professor C. A. Waldo, Purdue University; President John R. Kirk, Missouri State Normal School.

(2) To nominate officers: President W. S. Chaplin, Washington University; Inspector George B. Aiton, Minnesota; President D. R. Boyd, University of Oklahoma; Principal Edward L. Harris,

Cleveland Central High School; Principal J. O. Leslie, Ottawa, Illinois, High School.

(3) To audit the treasurer's report: President Charles S. Howe, Case School of Applied Science; Principal W. J. S. Bryan, St. Louis Central High School; Principal Geo. W. Benton, Shortridge High School, Indianapolis.

Professor F. N. Scott, University of Michigan, then presented the report of the delegates to the Conference on Uniform Entrance Requirements in English, as follows:

REPORT OF THE DELEGATES TO THE CONFERENCE ON UNIFORM ENTRANCE REQUIREMENTS IN ENGLISH.

The Conference on Uniform Entrance Requirements in English met at Teachers' College, Columbia University, New York City, on Wednesday, February 22, at 9:30. The following regularly accredited delegates were present: from the New England Association of Colleges and Preparatory Schools, Professor Mary A. Jordan, Smith College; Principal H. G. Buehler, Hotchkiss School, Lakeville, Connecticut; Principal William T. Peck, Classical High School, Providence, Rhode Island; from the Association of Colleges and Preparatory Schools of the Middle States and Maryland: Professor F. H. Stoddard, New York University; Principal Wilson Farrand, Newark Academy, Newark, N. J.; Professor

F. T. Baker, Teachers' College; from the North Central Association of Colleges and Secondary Schools: Professor F. N. Scott, University of Michigan; Professor M. W. Sampson, Indiana University; Professor G. R. Carpenter, Columbia University, acting as proxy for Principal C. W. French, Hyde Park High School, Chicago; from the Southern Association of Colleges and Preparatory Schools: Professor C. W. Kent, University of Virginia; Professor W. P. Trent, Columbia University, and Professor J. B. Henneman, University of the South.

The conference organized by the election of Professor Stoddard as chairman and Mr. Farrand as secretary.

After the reading of a number of the replies to the circular sent out in behalf of the conference, and the expression of general opinions by several members of the conference, it was voted that the division of the requirement into books for reading and books for study should be continued. The requirement was then taken up in detail and it was finally voted that the following requirement for the years 1909, 1910 and 1911 should be recommended to the constituent bodies for adoption.

It was voted that a committee of four, consisting of Professor Stoddard, Professor Scott, Professor Trent and Mr. Peck, should be appointed to consider the advisability of adding selections from the Bible to the requirement, to consult with leading educators on the subject, and to report to the next conference.

On motion it was

Resolved, That the attention of the constituent bodies be called to the fact that measures should be taken to provide for a meeting of the conference on February 22, 1908, to insure concerted action with regard to Uniform Entrance Requirements in English for 1912 and the years immediately following.

Votes of thanks were passed to the authorities of Teachers' College for their hospitality and to the members of the local committee for their arrangements for the conference. The conference then adjourned.

UNIFORM REQUIREMENTS IN ENGLISH FOR 1909, 1910, 1911.

NOTE.— No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

a. READING AND PRACTICE.— A certain number of books will be recommended for reading, ten of which, selected as prescribed below, are to be offered for examination. The form of examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number — perhaps ten or fifteen — set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the

books. In every case knowledge of the book will be regarded as less important than the ability to write good English. In place of a part or the whole of this test, the candidate may present an exercise book, properly certified to by his instructor, containing compositions or other written work done in connection with the reading of the books. In preparation for this part of the requirement, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

1909, 1910, 1911:

Group I (two to be selected).

Shakespeare's As You Like It, Henry V, Julius Caesar, The Merchant of Venice, Twelfth Night.

Group II (one to be selected).

Bacon's Essays; Bunyan's The Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography.

Group III (one to be selected).

Chaucer's Prologue; Selections from Spenser's Faerie Queene; Pope's The Rape of the Lock; Goldsmith's The Deserted Village; Palgrave's Golden Treasury (First Series) Books II and III, with especial attention to Dryden, Collins, Gray, Cowper and Burns.

Group IV (two to be selected).

Goldsmith's The Vicar of Wakefield; Scott's Ivanhoe, Quentin Durward; Hawthorne's The House of the Seven Gables; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; Dickens' A Tale of Two

Cities; George Eliot's *Silas Marner*; Blackmore's *Lorna Doone*.

Group V (two to be selected).

Irving's Sketch Book; Lamb's Essays of Elia; De Quincey's Joan of Arc and The English Mail Coach; Carlyle's Heroes and Hero Worship; Emerson's Essays (Selected); Ruskin's Sesame and Lilies.

Group VI (two to be selected).

Coleridge's The Ancient Mariner; Scott's The Lady of the Lake; Byron's Mazeppa and The Prisoner of Chillon; Palgrave's Golden Treasury (First Series) Book IV, with special attention to Wordsworth, Keats and Shelley; Macaulay's Lays of Ancient Rome; Poe's Poems; Lowell's The Vision of Sir Launfal; Arnold's Sohrab and Rustum; Longfellow's The Courtship of Miles Standish; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Evelyn Hope, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, The Boy and the Angel, One Word More, Herve Riel, Pheidippides.

b. STUDY AND PRACTICE.— This part of the examination presupposes the thorough study of each of the works named below. The examination will be upon subject-matter, form, and structure. In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

The books set for this part of the examination will be:

1909, 1910, 1911: Shakespeare's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address, and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

On motion the report was adopted.

Superintendent A. F. Nightingale introduced the following resolution which, on motion, was adopted:

Resolved, that the earnest thanks of the North Central Association of Colleges and Secondary Schools be extended to its delegates to the Conference on Uniform Entrance Requirements in English, for their persistent efforts, now crowned with success, to enlarge the reading requirements for college admission.

Director Carman introduced the following resolution which, on motion, was adopted:

Resolved, that this association request the College Entrance Examination Board to prepare questions in English for 1906 and thereafter, based on the revised list of books for 1909-1912.

Principal E. L. Harris of the Central High School, Cleveland, Ohio, then presented the report of the Committee on Athletics, as follows:

REPORT OF THE COMMITTEE ON ATHLETICS.

Your committee held a meeting at the close of the annual session of 1904, to take steps to carry out the instructions of the association, to have the rules

pertaining to athletic contests "printed and distributed to every university, college and secondary school in the north central states." The rules were prepared with a letter but by the time these made the entire circuit of the members of the committee it was so late in the season that it was thought best to postpone further action until the committee could meet again and make some necessary changes.

The committee recommends the following changes:

III. ELIGIBILITY OF CONTESTANTS.

Adopted in 1903 to read as follows:

Any person representing a school in any athletic contest whatever with any other school of the association must (1) be a *bona fide* student of the school which he represents; (2) he must have been such a student at least one year before such contest; (3) he must be carrying at least fifteen hours regular work upon which he has not previously received credit; (4) he must be maintaining a passing standard in scholarship in the said fifteen hours work; (5) in the secondary school he must not be more than twenty years of age; (6) he must not have played more than four years in the secondary school contests; (7) he must be an amateur sportsman; he must never have acted as an instructor in athletics; (8) no graduate of a secondary school shall be eligible to play in any interscholastic contest between secondary schools.

V. OTHER INSTITUTIONS NOT MEMBERS OF THIS ASSOCIATION.

To read as follows:

It shall be the duty of each institutional member of this association to require the observance of the

same regulations from other schools not members of the association before any contract takes place with said schools—provided, that in view of the action of the Chicago Conference in requiring of college freshmen a probationary period of half a year instead of a full year, institutions adhering to the above rule may for the present play with those requiring only a half year.

We further recommend that in every secondary school, college, and university the importance of athletics be recognized by the appointment of a regular teacher and instructor in the same who shall be a member of the faculty or teaching corps; we hold that the employment of professional coaches by student organizations or by outside parties is demoralizing and should be condemned.

Your committee asks for more time to print and to distribute the recommendations as ordered last year.

Respectfully,

EDWARD L. HARRIS
C. M. WOODWARD,
C. A. WALDO,
WM. J. S. BRYAN,
J. E. ARMSTRONG.

Committee.

It was moved by Principal Volland, and seconded by President Dabney that "three units as defined by this association" be substituted for "fifteen hours" in the report of the committee. By unanimous consent the report was referred back to the committee.

The committee reported the following amendment to the report:

Your Athletic Committee unanimously reports on the clauses referred back to them as follows:

(3) He must be carrying fifteen (15) hours per week; (4) he must be maintaining a passing standard in the said fifteen (15) hours, to read as follows:

(3) He must be carrying full work; (4) he must be maintaining a passing standard in scholarship in the said work.

Signed by the Committee.

On motion the report as thus amended was adopted.

[In accordance with the action of the association at last year's meeting the following complete report of the Committee on Athletics has been printed and given wide circulation—Secretary.]

CLEVELAND, OHIO, April, 1905.

DEAR SIR:

At the annual meeting of the North Central Association of Colleges and Secondary Schools held in Cleveland, March 1902, it was voted that a committee consisting of three representatives from the colleges and three from the secondary schools be appointed to take into consideration questions relating to both intercollegiate and interscholastic contests and to report a uniform set of rules to regulate such contests.

At the next annual meeting, held in Chicago, the committee made a partial report; the report supplemented and amended in 1904 and 1905 and adopted by the association, is as follows:

Your committee recommends the following general plan for institutional members of this association:

ORGANIZATION.

That there be organized in each school an athletic association with an executive committee that shall have entire charge of all athletics of the school. At least two members of this committee shall be members of the faculty of the school. This committee (1) shall be responsible for all receipts and all expenditures of money, and shall cause their accounts to be audited twice each year; (2) shall pass upon and ratify all contracts and all contests with other institutions before the same are valid; (3) shall be the final judge in all questions in games and contests within its own school.

ELIGIBILITY OF CONTESTANTS.

Any person representing a school in any athletic contest whatever with any other school of this association must (1) be a *bona fide* student of the school which he represents; (2) he must have been a student at least one year before such contest; (3) he must be carrying full work; (4) he must be maintaining a passing standard in scholarship in the said work; (5) in the secondary school he must not be more than twenty (20) years of age; (6) he must not have played more than four years in the secondary-school contests; (7) he must be an amateur sportsman; he must never have acted as an instructor in athletics; (8) no graduate of a secondary school shall be eligible to play in any interscholastic contest between secondary schools.

CERTIFICATION.

(1) The head of each institution of this association or a member of the corps of instruction designated by him shall send a list of the representatives of his school in any and every contest, at least one (1) week before the event is to occur, to the chairman of the executive committee of that school and to the manager or captain of the team of the competing school. He shall certify over his signature that every representative is eligible to enter the contest in accordance with the above rules. No assumed names shall be certified to nor allowed in any report of the game. (2) A member of the faculty shall always accompany said representatives to the contests. (3) A failure to carry out the above or any mistake in certification shall be ground for forfeiture of said contest on the part of the institution making such failure. (4) A protest against any contestant to be entertained must be made at least three (3) days before the contest by registered letter or in person to the captain of the opposing team and to the chairman of the executive committee.

**OTHER INSTITUTIONS NOT MEMBERS OF THIS
ASSOCIATION.**

It shall be the duty of each institutional member of this association to require the observance of the same regulations from other schools not members of the association before any contest takes place with said school, provided, that in view of the action of the Chicago Conference in requiring of college freshmen a probationary period of half a year instead of a full year, institutions adhering to the above rule

may, for the present, play with those requiring only a half year.

SENATE AND COURT OF APPEALS.

The committee also recommends that in a city where there are several schools of the same class a senate be formed composed of two (2) members of the faculty of each school represented in interscholastic contests, to which all questions or disputes not otherwise settled shall be referred for settlement; that there be a standing committee of six (6) appointed by this association, which shall comprise a court of appeals to which questions and disputes of institutional members of this association in reference to athletic contests may be appealed. The judgment of this court shall be final.

1. That this association earnestly recommends the general adoption of three probationary years in athletics — first, one entire year at the beginning of the secondary period; second, one entire year at the beginning of the collegiate period; third, one entire year at the beginning of the graduate period.

2. That in case a student migrates during any of the three periods mentioned he shall remain in his new institution one year before participating in any intercollegiate or interscholastic contest.

3. That natural groups of institutions having athletic relations with each other should publish annuals giving, first, business publicity, and second, permanent athletic records.

4. That the members of this association pledge themselves to use their influence with state teachers' associations and state college associations and other educational organizations, including faculties of uni-

versities, colleges, and secondary schools to secure their support in bringing about the adoption of these resolutions, especially the first and second.

5. That this committee be empowered to act with other college and secondary associations, east and west, to secure the adoption of the three probationary-years principle.

6. We further recommend that in every secondary school, college and university the importance of athletics be recognized by the appointment of a regular teacher and instructor in the same who shall be a member of the faculty or teaching corps; we hold that the employment of professional coaches by student organizations or by outside parties is demoralizing and should be condemned.

In addition, Dean Woodward presented the following which was adopted:

Having adopted certain rules intended to eliminate some of the evils attending interscholastic and intercollegiate athletics, it becomes us to take definite steps to secure a general adoption of said rules by local faculties.

To this end we recommend that the committee be authorized to have the new rules printed and distributed to every university, college and secondary school in the North Central States, with two requests in each case:

(1) That the rules be brought before the faculty for adoption.

(2) That the action of the faculty, of whatever nature, be at once reported to the chairman of this committee so that due progress may be made known to this association next year.

Finally we suggest that with a view to successful united action along these lines it be declared the duty of every member of this association to champion to the best of his ability the adoption and faithful observance of these rules by the local authorities.

In accordance with the last resolution will you bring these rules before your faculty or governing body; will you kindly report the action of said faculty or governing body to the member of the committee designated to attend to the correspondence from your state, noting at what time you can put the rules into force if adopted?

EDWARD L. HARRIS, Ohio and Michigan.
Central High School, Cleveland, O.

C. A. WALDO, Indiana and Minnesota.
Purdue University, Lafayette, Ind.

A. A. STAGG, Illinois and Eastern States.
University of Chicago, Chicago, Ill.

C. M. WOODWARD, Missouri and Kansas.
Washington University, St. Louis, Mo.

J. E. ARMSTRONG, Iowa and Wisconsin.
Englewood High School, Chicago, Ill.

W. J. S. BRYAN, Colorado, Nebraska and
Oklahoma.

Central High School, St. Louis, Mo.

A report of the Commission on Accredited Schools was then presented by President Charles F. Thwing, Chairman of the Committee on Requirements for the Bachelor's Degree, as follows:

REQUIREMENTS FOR THE BACHELOR'S DEGREE.

Your Committee is acting under a vote passed at the eighth annual meeting in 1903 "that a committee

of five be appointed to take into consideration the advisability of extending the work of the commission so as to include accredited colleges and to determine what should be the requirements for the bachelor's degree." Under a vote passed at the ninth meeting the report was discussed and accepted, and it was voted that the committee be continued with the view of covering more fully the question submitted to it by the commission.

The report is concerned, first, with a brief view touching the history of the A. B. degree; second, it includes a statement of what the degree should represent in the person receiving it; third, it includes a statement of the requirements for the degree touching, (a) admission to college, and (b) graduation from college. The statement regarding graduation from college refers both to hours or units and also to the content of the course. Fourth, a statement is made regarding the contribution which different subjects of study make in constituting the results which the degree should represent. This statement has to do with both the advantages which belong in common to all subjects and also to the unique advantages of certain subjects. A fifth part relates to what may be called professional concessions or combinations. The sixth, and concluding part of the report, touches upon inspection of colleges.

The history of the A. B. degree is obscure. In the fifteenth and sixteenth centuries, the degree stood for the passing of certain examinations, and also carried along with itself the right to teach. From the beginning, in this country, the degree has represented usually four years of undergraduate

study. For about two centuries it was the only degree given. Near the middle of the last century the inclusion of scientific studies in the curriculum promoted the introduction of the B. S. degree. The enlargement also of the course of study outside of scientific subjects, caused the introduction of other degrees. The chief of these were the degree of B. L. and of Ph. B. That, however, the degree of B. A., is still dominant, is indicated in the fact that the report of the Commissioner of Education for the year 1902 shows that there were granted 5,446 degrees of B. A., 774 degrees of Ph. B., and 246 degrees of B. L. The present sentiment and movement, moreover, seems to be in favor of the consolidation of degrees.

Second, in respect to what the degree should represent in the person of the one receiving it, it is superfluous to multiply interpretations. It may, however, be simply and safely said that the man who bears the degree should represent at least four elements; he should be a student, a scholar, a thinker, and a gentleman.

He should be a student; intellectual labor should be a habit. Problems of all sorts, mechanical, social, political and other, should be, in their primary relations, problems for the mind. His sympathies with studies of all kinds should be warm as well as large. He should be an intellectual worker.

Moreover, he should be a scholar. His learning may be either broad and slight, or narrow and deep. It may touch a few subjects profoundly, or many lightly. He is at least to have an acquaintance with the field of knowledge. He therefore is to know, at least in a general way, the results which have been

achieved, the methods which are pursued, the forces used, and the aims which are still dominant. He should know where his learning ends, where his ignorance begins, and also he should know the nature of that large domain of twilight knowledge and ignorance, where humility most becometh the human spirit. He is ever to be sympathetic with scholarship.

He is, furthermore, to have the quality and power of orderly and exact thinking, to see, to compare, to infer. To see truth, to relate truths, to infer new truths, to judge, to reason, to assess facts at a just value, to compare fact with fact.

These are his functions as a thinking college man. He is to possess a sense of relations; he is to be able to disentangle the complex, to divide the essential from the accidental, to induce principles from facts and to apply principles to conditions. He is to be thoughtful as well as thinking; he is to be a searcher for truth in some field, as well as a conservator of truths known. He is, furthermore, to be a gentleman. If these four great results are to be interpreted as aims rather than as specific attainments, yet their presence as aims, in the man having a degree, represents and obliges a certain appreciation and possession of them.

The third statement is concerned with the requirements which the colleges make regarding the methods and means for securing these great results.

The following tabulations have been made from the study of college calendars. An attempt has been made to unify the various systems of units and semester or term or year hours of the various institutions. In admission requirements, the term unit as already

defined by the North Central Association has been adopted. This means a study prescribed for one school year of at least thirty-five weeks for at least four or five periods per week of prepared work.

In the requirements for graduation the semester hour has been made the basis of comparison. This is applied to a study pursued for one semester or half year for one hour a week.

A group has been made of the institutions having membership in the association; and a second group includes other leading institutions of the country.

The tabulation involved several difficulties. Many institutions have three terms in the year rather than two semesters. In the case of such institutions, the "term hour" has been rendered into approximately equivalent "semester hours." In some institutions the "point system" is used. This presents a still greater problem in adjustment to a uniform scheme.

Many catalogues are vague or indefinite in statement of requirements, and in some decided inconsistencies are found.

In general, Algebra through quadratics, has been counted as $1\frac{1}{2}$ units; Plane Geometry, 1 unit; and Solid Geometry as $\frac{1}{2}$ unit. Greek, including three or four books of Xenophon and three books of Homer, has been counted as three units, although some institutions seem to regard it as only two units. The generally accepted English requirements for college are counted as three units. In a few cases where Greek as an admission requirement is optional with Latin, only Latin has been named on the assumption that Greek would practically never be elected.

	Admission Figures indicate units.	Graduation Figures indicate semester hours.
Albion College,	15 units; Math. 3, Eng. 3, Science 1, Language 120 hrs. No. Spec. 2, Optional 6.	
Beloit College,	14 units; Language 2, Eng. 2, Hist. 1, Math. 128 hrs. Must have a major subject continuous. 2, Science 1, Elective 6.	
University of Cincinnati,	16 units; Eng. 3, Math. 2, Science 1, Hist. 1, 120 hrs.; Eng. 6, Science 10, Philosophy or 2 languages (Latin 3 or 4, Greek 2 or 3, French 2 or 4.) Added unit in Eng. for those without Latin and Greek. Psychology 8. Reading knowledge of two languages (Latin 3 or 4, German 2 or 4.) Added unit in Eng. for those without Latin and Greek.	
University of Chicago,	15 units; Latin 4 (or 2), Math. 3 (or 2), Jr. Col. 60 hrs., 20 in Lat. or Greek, 10 Mod. Greek 2, Eng. 3, Hist. 1, Physics 1, Fr. or Lang., 20 Math., Science, and Eng.; Sen. Ger. 1. 60 hrs. elective.	
Colorado College,	16 units; Eng. 3, Hist. 1, Lat. 2, Fr. or Ger. 120 hrs.; Major required; 48 Lang., Math. 8. 2, Science 2, Elective 4.	
University of Colorado.	16 units; Language 4 (Latin preferred), Eng. 130 hrs.; Math. or Ancient Lang. or Science 3, Hist. 2, Science 2, Math. 2, Elective 3. 10, Eng. 10, Major 20.	
Cornell College,	15 units; Eng. 3, Hist. 2, Math. 2½, Science 1½, 128 hrs.; Math. 10, Lang. 30. Latin 4, Greek, Fr. or Ger. 2.	
Denison University,	15 units; Latin 4, Greek 2, Eng. 3, Math. 3, 123½ hrs.; Greek and Latin 2 years. Hist. 2, Physics 1.	
Drury College,	14 units; Math. 2½, Eng. 3, Hist. 2, Latin 4, 120 hrs.; Greek and Latin 2 years.	
University of Illinois,	14 units; Math. 2½, Eng. 3, Hist. 1, Language 130 hrs.; including 5 Military Drill, 2 Physi- cal Training. 3, Elective 4½.	
Indiana University,	16 units; Eng. 6, Math. 6, one language 3, Hist. 120 hrs.; Eng. 15, Math. 15, Science 15, Lan- guage 30. 1, Science 1, Elective 6. (Recommended that electives consist of extension of others.)	
State University of Iowa,	13½ units (?) ; Eng. 3, Hist. 1, Math. 2½, Greek 120 hrs. (?) (years specified). Greek 10, Lat. 3, Latin 4, Ancient Hist. 1, Science 1. 4, Eng. 4, Math. 4.	

	Admission Figures indicate units.	Graduation Figures indicate semester hours.
Iowa College,	15 units; Eng. 3, Math. 3, Greek 3, Latin 4, 120 hrs.; 1 Major in Latin or Greek 5 hrs., Ancient History 1, Science 1.	1 Minor in Latin, and 1 in Greek.
University of Kansas,	15 units; Math. 2½, Eng. 3, Science 2, Hist. 1, 120 hrs.; Rhetoric 8, Eng. 4, Math. 4, Lang. Language 3, Optional 4½.	6, Phys. Science 3, Biological Sci. 3, Hist. 2.
Lake Forest College,	13½ units; Latin 2, Math. 2½, Eng. 3, Science 2, Hist. 1, 140 hrs.; Lang. 20, Math. 20, Eng. 10, Science Science 1, Elective 4.	25 hrs. No Latin or Greek required.
Knox College,	15 units; Latin 4, Eng. 2½, Math. 2½, Hist. 1, 120 hrs.; 4 groups — (1) Latin and Greek; Physics 1, Optional 4.	(2) Latin, Fr. or Ger.; (3) Latin, more Modern Lang.; (4) Lat. Hist. Science.
Miami University,	15 units; Eng. 3, Lat. 2, Math. 3, Physics 1, 120 hrs.; 30 hrs. of Lang.; 3 years of some Hist. 1, Optional 5.	one.
University of Michigan,	15 units; Math. 3, Eng. 3, Physics 1, Optional 120 hrs. 8, (of which 2 must be Latin, Greek, French, or German.)	120 hrs.; Latin 10, other languages 18.
Milwaukee-Downer College,	15½ units; Latin 4, Greek, or French, or German 2, Math. 3, Physics 1, Eng. 3, Hist. 2.	
University of Minnesota,	15 units; Eng. 4, Math. 3, Optional 8. No foreign language work necessary, but 1 unit of eign language work necessary, but 1 unit of Latin may substitute for 1 of English.	126 hrs.; at least 12 hrs. of each of 3 subjects, one of which must be English or foreign language.
University of Missouri,	14 units; after 1906, 15 units; Eng. 3, Math. 3, 120 hrs.; must have 12 hrs. in each of 4 sub- foreign language 2, Hist. 1, Science 1.	jects, and 24 hrs. in a fifth subject.
Missouri Valley College,	15 units; Latin 2, Greek 2, English 2, Math. 2, 128 hrs.; ¾ elective. Indefinite amount of Science 1, optional 3.	Latin and Greek in first 2 years.
University of Nebraska,	14½ units; Math. 3, Eng. 2, Hist. 1, Latin 2 (or 125 hrs.; 20 hrs. in Language, more). Added Lang. 1, optional 5½.	
Northwestern University,	15 units; Eng. 3, Math. 3, Hist. 1, Physics 1, 120 hrs.; 8 hrs. Lat. or Greek, 22 hrs. of Lang. Foreign Language 4, optional 3.	altogether, Math. 8, or 10. Sci. 6 or 8, Hist. etc., 6, Eng. 8.

	Admission Figures indicate units.	Graduation Figures indicate semester hours.
Oberlin College,	15 units; Eng. 3, Math. 3, Lang. 4 (Latin or 120 hrs. No Greek or Latin. Almost entirely elective. Greek 2), Hist. 1, Sci. 1, optional 3.	
Ohio State University,	15 units; Eng. 2, Hist. 2, Math. 3, Science 2, 120 hrs. Degree A. B. 3 prescribed work. Lang. (Lat., Gr., French, German, Spanish) 4 hrs. Eng. 16 other lang., 12 Math. or Sci. 6 Hist., etc. Two Freshman studies must be continued through Soph. yr., one Soph. study through Jr. yr., one Jr. study through Senior year.	
Ohio Wesleyan University,	16 units; Eng. 3, Hist. 2, Math. 3, Latin 4, 120 hrs.; Latin 18 or 9, Greek 18 or 9, German 3, Elective 1.	
University of Oklahoma,	12 $\frac{1}{2}$ units; Eng. 3, Lat. 2, Math. 2 $\frac{1}{2}$, Hist. 2, 120 hrs.; Eng. 7, Fr. or Ger. 8, Hist. 4. Must Physics 1, Other Science 1, Optional 2.	
Olivet College,	15 units; Eng. 3, Math. 3, Latin 2, Hist. 1, 128 hrs.; seven prescribed groups, largely Phys. 1, Optional 5.	
Park College,	Impossible of tabulation.	
Ripon College,	14 $\frac{1}{2}$ units; Eng. 3, Lat. 4, Math. 2 $\frac{1}{2}$, Physics 1, Hist. 2, Greek or German 2.	
Wabash College,	16 units; Eng. 3, Math. 3, Lang. 3, Hist. 1, 125 $\frac{1}{2}$ hrs.; A. B. only. Language 24 (of which Science 1, Elective 5.	
Washington University, Western Reserve University,	16 units; Latin 4, Math. 3, Eng. 3, Greek, or 123 hrs.; Latin 6.	
University of Wisconsin,	Fr., or Ger. 3, Physics 1, Chem. 1, Hist. 1. 14 $\frac{1}{2}$ units; Math. 2 $\frac{1}{2}$, Eng. 2, Hist. 1, Science 1, 120 hrs.; Eng. 6, Lang. 24 (16 if four units Foreign Language 2, Optional 6.	(16 if four units are given for admission.) A major of 20 hrs. minimum after Freshman year. Thesis on major subjects.

INSTITUTIONS IN NORTH CENTRAL ASSOCIATION.

INSTITUTIONS REQUIRING LATIN AND GREEK FOR ADMISSION.

	LATIN (UNITS)	GREEK (UNITS)
University of Chicago,	4 (or 2)	2
Denison University,	4	2
Drury College,	4	2 ¹
State University of Iowa,	4	3 (May be done in college).
Iowa College,	4	3
Missouri Valley College,	3	2 (?)
Ohio Wesleyan University,	4	3
Park College,	4	2

REQUIRING LATIN.

	LATIN UNITS.
Colorado College,	2
Cornell College,	4
Knox College,	4
Lake Forest College,	2
Miami University,	2
Milwaukee-Downer College,	4
University of Nebraska,	2
Northwestern University,	4
Oberlin College,	2
Olivet College,	2
Ripon College,	4
Washington University,	4
Western Reserve University,	4

REQUIRING LANGUAGE, BUT NOT NECESSARILY LATIN OR GREEK.

	UNITS.
Albion College,	2
Beloit College,	2
University of Cincinnati,	4
University of Colorado,	4
University of Illinois,	2
Indiana University,	3
University of Kansas,	3
University of Michigan,	2
University of Missouri,	2
Ohio State University,	6
Wabash College,	3

REQUIRING NO LANGUAGE.

University of Minnesota.

INSTITUTIONS NOT MEMBERS OF NORTH CENTRAL ASSOCIATION.

	Admission Figures indicate units.	Graduation Figures indicate semester hours.
Amherst College,	13½ units; Latin 4, Eng. 3, Math. 2½, Hist. 1, 116 hrs.; 1 yr. or 6 hrs. of Lat. or Greek 1 Greek, or French, or German 2, Optional 1, yr., or 6 hrs. of Math. Other work elective.	
Boston University,	14½ units; Latin 4, Greek, or French, or German 3, Math. 2½, Hist. 1, Eng. 3, 3d lang. 1, 120 hrs.; Latin 6, French 4, German 4, Math. man 3, Math. 2½, Hist. 1, Eng. 3, 3d lang. 1, 6, Hist. 4, Eng. 4, Economics 4, Science 4.	
Bowdoin College,	13½ units; Eng. 3, Math. 2½, Lat. 4, Hist. 1; Requirements indefinitely expressed. No Elective Greek, French or German 3.	
Brown University,	13½ units; Eng. 3, Math. 2½, Hist. 1, Lat. 4, 120 hrs.; Ancient Language 6, Mod. Lang. 6, Greek, or French, or German 2, Elective 1. Math. 4. (Units adopted from "point" system.)	
Colgate University,	14½ units; Eng. 3, Lat. 4, Greek 3, Math. 2½, 134 hrs. approximately; Lat. 12, Greek 13, French 6, German 6, Eng. 8 (approximately), Phys. or Chem. 7 (approximately). Hist. 1, Physiology 1.	
Columbia University,	14½ units; Eng. 3, Math. 2½, Lang. 4, Optional 120 hrs.; Eng. 10, Fr. or Ger. 3, Lat. 11 (elementary, if not presented for admission), Math. 6, Hist. 6, Physiology 3, Economics 3, Science 3. Certain subjects may be presented for admission instead of taken in College.	
Cornell University,	14 units; Eng. 3, Math. 2½, Hist. 1, Elective 7. 120 hrs.; no restrictions. (At least 6 lang., modern or ancient.)	
Dartmouth College,	13½ units; Lat. 4, Hist. 1, Math. 2½, Eng. 3, 122 hrs.; Lat. 6, Eng. 6, Math. 6, another Greek 3, or French or German 2, and Science 1.	
Harvard University,	16½ units (approximately); Lat. 3, Eng. 3, 105 hrs. approx.; 17 or 17½ courses in general French or German 2, Hist. 1, Math. 2½, Science 1, Optional 4.	

		Admission Figures indicate units.	Graduation Figures indicate semester hours.
Johns Hopkins University,	14½ units; Math. 2½, Lat. 4, Greek 3, or French 120 hrs. (including special year before regular matriculation.) The course regularly includes but 3 years. Lat. 6, Math. 8, Greek or German, or French 6 approx., added language 6.	This admits to special course. Added year required for full matriculation.	
Mount Holyoke College,	14½ units; Lat. 4, Eng. 3, Math. 2½, Hist. 1, 120 hrs.; Lat. 8, second lang. 8, Math. 8, Eng. Greek, or French, or German 3. Third 8, Science 8, Biblical Literature 2.		
University of Pennsylvania,	13½ units; Lat. 4, Greek 3, Math. 2½, Eng. 3, 120 hrs.; Latin 6, Greek 6. Hist. 1.		
Princeton University,	15½ units; Latin 4, Greek 3, Eng. 3, French or 121 hrs.; Lat. 12, Greek 12, Math. 11, Physics Ger. 2, Math. 2½, Hist. 1.		
Smith College,	14½ units; Latin (or Greek) 4, Greek, or 104 hrs.; Latin or Greek 6, French or Ger. 6, French, or German 3, Eng. 3, Math. 2½, Math. or Logic 6, Physics or Chem. 6, Eng. Hist. 1.		
Syracuse University,	14 or 14½ units; Lat. 4, Greek 3, Eng. 3. Math. 120 hrs.; Lat. 6, Greek 6, Mod. Lang. 6, Math. 2½, Hist. 1, Optional ½ or 1. 13½ units; Lat. 4, Greek 3, Eng. 3, Math. 2½, 120 hrs.; Lat. 6, Greek 6, French or German Hist. 1.		
Trinity College,	14 units; Lat. 4, Eng. 3, Hist. 1, Math. 2½, 128 hrs.; 18 hrs. in 3 languages (Latin, Greek, French, German, or Hebrew.) Must have 18 hrs. in "major" and 18 in collateral subjects.		
Tufts College,	Elective 6½.		
Union University,	14½ units; Lat. 4, Greek 3, Eng. 3, Math. 2½, 128 hrs.; Lat. 14, Greek 14, Math. 7, approx., Hist. 1, Geography and Physiology 1.		
Vassar College,	14½ units; Lat. 4, Greek, or French, or German 118 or 120 hrs.; Latin or Greek 6, Mod. Lang. 6, Science 6, Math. 6, Eng. 6, Hist. 6, Philosophy or Psychology 3, Ethics 3.		

Wellesley College,

Admission Figures indicate units. Graduation Figures indicate semester hours.

14 $\frac{1}{2}$ units; Lat. 4, Greek, or French, or German 3, Math. 2 $\frac{1}{2}$, Eng. 3, Hist. 1, third lang., or Chemistry, or Physics 1.

13 $\frac{1}{2}$ units; Lat. 4, Greek 3, Hist. 1, Math. 2 $\frac{1}{2}$, 120 hrs. approx.; Latin 8, Math. 8, Modern Eng. 3, Language 6.

13 $\frac{1}{2}$ or 14 $\frac{1}{2}$ units: Lat. 4, Eng. 3, Math. 2 $\frac{1}{2}$, Hist. 1, Greek, or French, or German 3. (Third Language 1, or Greek must be taken.) (Third hrs. required.)

13 $\frac{1}{2}$ units; Lat. 4, Math. 2 $\frac{1}{2}$, French or German 120 hrs. (?); Latin and Greek may be omitted. (Math. 1 $\frac{1}{2}$ and French 1, and German 1), or French 1 and German 2.

Wesleyan University,

Williams College,

Yale University,

INSTITUTIONS NOT MEMBERS OF NORTH CENTRAL
ASSOCIATION.

REQUIRING LATIN AND GREEK.

Colgate University,	4	3
Princeton University,	4	3
University of Pennsylvania,	4	3
Syracuse University,	4	3
Trinity College,	4	3
Union University,	4	3
Wesleyan University,	4	3

REQUIRING LATIN.

Amherst College,	4	Gr. or Fr. or Ger. 2.
Boston University,	4	Gr. or Fr. or Ger. 3.
Bowdoin University,	4	Gr. or Fr. or Ger. 3.
Brown University,	4	Gr. or Fr. or Ger. 2.
Dartmouth College,	4	Gr. 3, or Fr. or Ger. 2.
Harvard University,	4	Fr. or Ger. 2.
Johns Hopkins University,	4	Gr. or Fr. or Ger. 3.
Mount Holyoke College,	4	Gr. or Fr. or Ger. 3.
Smith College,	4	Gr. or Fr. or Ger. 3.
Tufts College,	4	
Vassar College,	4	Gr. or Fr. or Ger. 3.
Wellesley College,	4	Gr. or Fr. or Ger. 3.
Williams College,	4	Gr. or Fr. or Ger. 3.
Yale University,	4	Other language 3.

REQUIRING LANGUAGE, BUT NOT NECESSARILY
LATIN OR GREEK.

Columbia University,	4	
Cornell University,	6	
LATIN.		GREEK.
(UNITS.)		(UNITS.)
LATIN.		GREEK.
(UNITS.)		(UNITS.)
LATIN.		LATIN.
GREEK.		GREEK.

A careful study of the requirements of different institutions shows almost amazing diversity of requirements. A comparatively small number of institutions still insist on Latin and Greek in the preparatory period. The recent abandonment by Yale of the Greek requirement is a significant fact. In general, the East has been more conservative than the West. Many institutions have carried the elective principle as far as seems possible, and it may be doubted whether they have not passed the safe limit of educational values.

It is possible in many institutions to enter having had $2\frac{1}{2}$ or 3 units of Mathematics, 3 units in English, and 2 units in one other subject, and then after four years of browsing over the entire range of knowledge with no sustained effort in any one direction to obtain the A. B. degree. This should be made impossible. The undisputed merit of the classical curriculum is that it requires sustained effort and definite achievement in one direction at least. The elective system should be so administered as to secure sustained effort and definite achievement.

Some institutions think they have in good degree gained this result by the group system; others, by a system of majors, and yet others by the supervision of electives by a committee of the faculty. The important thing is that in some way it be secured.

Fourth: In respect to the contribution which different subjects make toward the great results which the man who has received the A. B. degree embodies, your Committee recognized that a prolonged statement would be superfluous. It is simply necessary to state that the pursuit of each study of

the curriculum represents results in the character of the student which every other study represents. Each study stands for intellectual discipline; each for the development of the power of interpretation; each trains the quality of exactness in discrimination; each makes an offering toward the constitution of the scholar and of the thinker.

But there are certain results which are more or less unique to the specific subjects. In general, language trains the power of interpretation; but each language offers, through the knowledge of the nation of which it is the speech or literature, a certain acquaintance with its people. The two ancient languages which are constantly studied are in a sense the basis of modern civilization. A knowledge of the Greek and Roman life, constitution, character, is borne through a literature. It would also be acknowledged that Greek literature has a special relation to the knowledge of our modern literature, in particular in its dramatic relationships. A knowledge of the Greek drama is essential to a proper understanding of the French drama. The kinship of the German and of the English is so fundamental and vital that a knowledge of German is essential to an understanding of our English speech. Furthermore, German aids in appreciation of the social, economic, legal, and religious usages of our English people. The French language above most others, offers a unique advantage in absolute clarity of expression. A knowledge of English literature stands for the purest and strongest ethical inspirations. No literature is so morally clean as the English. The training in composition embodies a most forceful method,

not only for clear, accurate expression, but also for clearness and accuracy in thinking. History produces, among many results, what may be called historical mindedness. It represents a training in the sense of impartiality. It embodies a largeness in vision, in interpretation, in judgment. Mathematics offers a discipline in absolute accuracy and also in a sense of relationships. Economics, political science, present man as a social and political being. Economics represents not only a knowledge of men, but also of man. The sciences, taken as a body, bear what is called the scientific method to the student, but each also represents a unique contribution. Chemistry stands for insight into the nature, structure and constitution of matter. Physics stands for the laws of matter. Biology represents an insight into the organic world. It represents a transition from lower to the highest forms of life. Geology, the crown of the other sciences, is concerned with the whole history of the earth,— biological, physical, chemical. Philosophy, in turn, represents the science of man himself. It is a form of biology. The illustrations of its truth are found in man. It represents, too, the methods in which the race has discussed its lasting problems from the beginning.

Thus each of the great subjects of the course offers general and unique contributions to the student who pursues it. Each of these subjects embodies a specific element in the contribution offered for the making of the student, the thinker, the scholar, and the gentleman.

Yet although each subject does offer a specific contribution, and possibly because it does, your Com-

mittee is inclined to emphasize the value of the continuous pursuit of a special study or of a group of studies. The evils of heterogeneous or disconnected choice are evident. The first approach of the student to a study is through its simple elements. Such a pursuit does not conduct to strength and largeness of intellectual training. The largest worthiness in intellectual results is secured through prolonged and careful attention to the severer and more fundamental parts of a subject. Either by means of the group system or by certain limitations of the free choice of studies, we believe that better results are secured. A certain degree of general choice may be allowed, but the general choice should be made consistent with a certain prolonged and special pursuit of great subjects.

Fifth: A further element of the requirements for the A. B. degree refers to what may be called professional concessions or combinations. Such concessions or combinations seem to be inevitable. Their imperative character renders the approval of them by your Committee somewhat superfluous. The Committee, however, is prepared to approve of them so far forth as to believe that the college should yield with gracefulness to the conditions. Such combinations should be allowed. The student may or may not take advantage of the permission. In not a few cases the authorities may advise him not to take advantage of them. In others it may proffer advice to the opposite intent. Such concessions or combinations, therefore, come to belong to the general freedom of elective studies. This condition has arisen from the increase in requirements for admission to

college and in the increased requirements for admission to and for graduation from the professional school, especially of medicine and of law. At the present time, colleges in this association are adopting several methods of concession or of combination. One method consists in the devotion of the first year of the professional course as the last year of the undergraduate. This method is applied in universities which contain professional schools as well as the undergraduate college. One method is embodied in allowing the undergraduate senior to take a part of his work in the medical or law school, usually about one-half, which work counts toward both the bachelor's and the professional degree. A further method consists, in case the college contains no professional school, in allowing the undergraduate senior to enter a professional school under the general direction of his college and to count the first year taken in the professional school as the last year in the undergraduate course. Wabash is an eminent example of this method. (This question has relation to the discussion under *Three*.)

Sixth: It has been suggested that the Committee draw up what might be called a list of accredited colleges co-ordinate with a list of accredited fitting schools. The Committee is loath to make such a classification. The attempt is beset by serious difficulties.

The Committee, however, would remind the members that the association is acting under two votes, the value of which for securing such a desired list may be great. One of these votes is to the effect that no college in the association shall give the de-

gree of Doctor of Philosophy for less than two years of study, and further, that no college in the association shall admit students to the Freshman year with less than fifteen units of work in preparation.

Respectfully submitted,

CHARLES F. THWING, *Chairman.*

J. B. ANGELL,

JAMES H. BAKER,

F. L. BLISS,

31 March 1905

Committee.

Second Session, Friday Afternoon.

The Association was called to order at 2:30 o'clock P. M. by President Bliss. The Commission on Accredited Schools through its Chairman, Professor H. P. Judson, of the University of Chicago, presented the following report, which was, on motion, adopted.

REPORT OF THE COMMISSION ON ACCREDITED SCHOOLS.

In presenting the report of the Commission I beg to call attention first to the action of the Board of Inspectors as approved by the Commission. The list of accredited schools for the year 1905-6 is herewith submitted. You will note in the list, in the first place, the omission of certain schools that were on the list for the current year. These omissions do not necessarily imply that the schools in question have failed to conform to the standard. In some cases the school authorities have neglected to make the report which the Commission requires, and the Board of Inspectors, in the absence of the specific reports has been unwilling to act. In some instances this failure to report is due to a change of school authorities; in other instances doubtless to indifference. In either case inasmuch as the list is prepared annually, it has been necessary to omit the schools in question.

It will be noted also that the Board has added to the list a considerable number of schools. In some states the number being practically doubled. The increase will be especially noted in Ohio, Michigan, Wisconsin and Illinois.

The Commission has been much interested in reports of the Inspectors as to the practical working of the plan in the schools. In general it may be said that the Commission found in a number of states that the operation of inspection has been an unquestionable incentive to improvement in the schools. In several states the school authorities have taken action to supply things which were lacking to make their schools conform to the Commission's standard. In some cases the authorities have been willing to reduce the number of classes assigned to teachers, and the number of students in classes. On the whole I am satisfied that the Commission has reason for encouragement and has good ground to feel that the tendency of its work has been towards lifting the standard of work and towards unifying the policy of secondary schools in most of the states concerned in the Association.

Herewith is submitted the report of the Board of Inspectors, as presented by its Chairman, Professor Whitney.

The Commission has given some attention to modifying and improving the definitions in some subjects. Subcommittees are given further time to improve the formulation of the definition in Zoölogy, Shop-work, Drawing, Physical Culture, and in Commercial subjects. It is expected that the Commission at the next meeting of the Association will be pre-

pared with modifications, therefore, in those subjects.

In order that the definitions may be under constant and careful consideration the Commission has constituted standing committees in all the respective subjects. These committees are expected to report annually to the Commission.

The Commission has voted also that schools outside of the states represented by the Association may be added to the accredited list and recommended by the Board of Inspectors.

The committee assigned to take into consideration the advisability of extending the work of the commission so as to include accredited colleges and determine what shall be the requirements for the Bachelor's degree presented a preliminary report which was submitted at this morning's session directly to the Association without action by the Commission. This report of the committee which was read by its Chairman, President Thwing of the Western Reserve University, was of the nature of detailed information as to the requirements for the degree in a variety of colleges.

It is understood that the Commission will take up the subject matter of this report at its next meeting.

REPORT OF THE BOARD OF INSPECTORS FOR 1905.

To the Commission on Accredited Schools:

Your Board of Inspectors desire to report that they have held two sessions and have given careful

consideration to the work assigned them by your honorable body, and herewith submit resolutions that have governed them in their action, together with a list of schools. The following inspectors were present:

Densmore, Beloit College; Butler, University of Chicago; Brown, University of Iowa; Hollister, University of Illinois; Hicks, University of Cincinnati; Elliff, University of Missouri; Whitney, University of Michigan; Aiton, State Inspector of Minnesota; James, Northwestern University; Tressler, University of Wisconsin; Boyd, Ohio State University.

There were no representatives from Indiana, Kansas or Nebraska. The inspector from Colorado was unavoidably detained, but sent complete reports.

The standards that have governed the Board in their actions have been the same as those adopted last year with the following modifications:

Resolved, that the word "enrollment" in Rule 3, be changed so as to read: "Average number belonging."

Resolved, that where there is any reasonable doubt, the board will take the doubt as grounds sufficient to justify rejection.

Resolved, that the McKinley School, St. Louis, Mo., be continued on the list, but that in the future no school will be accepted that has not in actual operation the full four years' course.

The following constitute the list of schools:

COLORADO: Cannon City; Cripple Creek; Denver, West Side; Durango; Ft. Collins; Golden; Grand Junction; Greely; La Junta; Leadville; Pueblo, Central; Pueblo, District No. 1; Trinidad; Victor.

pared with modifications, therefore, in those subjects.

In order that the definitions may be under constant and careful consideration the Commission has constituted standing committees in all the respective subjects. These committees are expected to report annually to the Commission.

The Commission has voted also that schools outside of the states represented by the Association may be added to the accredited list and recommended by the Board of Inspectors.

The committee assigned to take into consideration the advisability of extending the work of the commission so as to include accredited colleges and determine what shall be the requirements for the Bachelor's degree presented a preliminary report which was submitted at this morning's session directly to the Association without action by the Commission. This report of the committee which was read by its Chairman, President Thwing of the Western Reserve University, was of the nature of detailed information as to the requirements for the degree in a variety of colleges.

It is understood that the Commission will take up the subject matter of this report at its next meeting.

REPORT OF THE BOARD OF INSPECTORS FOR 1905.

To the Commission on Accredited Schools:

Your Board of Inspectors desire to report that they have held two sessions and have given careful

Marie; Saginaw :—West Side, East Side; St. Joseph; Traverse City; West Bay City; Ypsilanti.

MINNESOTA : Duluth; Minneapolis, Central, East Side, North Side, South Side; Redwing; St. Paul, Central, Cleveland, Humboldt; Winona.

MISSOURI: Columbia; Kansas City Central; Kansas City Manual Training; Trenton; St. Louis McKinley; St. Louis Central.

OHIO: Akron; Astabula; Bellefontaine; Cincinnati: Hughes, Walnut Hills, Woodward; Cleveland Central, East, Lincoln, South, West; Columbus East, North, South; Coshocton; Delaware; East Cleveland; East Liverpool; Elyria; Fostoria; Glenville; Greenville; Lakewood; Lancaster; Mansfield; Marion; Middletown; Mount Vernon; Newark; Piqua; Portsmouth; Salem; Sandusky; Toledo; Troy; Van Wert; Warren; Wooster; Xenia; Youngstown; Zanesville.

WISCONSIN: Appleton; Ashland; Baraboo; Wayland Academy at Beaver Dam; Beloit; Berlin; Chippewa Falls; Eau Claire; Fond du Lac; Grand Rapids; Janesville; La Crosse; Madison; Marinette; Marshfield; Menomonie; Milwaukee, East Division, West Division, South Division, Milwaukee-Downer Seminary; New Richmond; Oshkosh; Portage; Racine; Ripon; Sheboygan; Sparta; Stevens Point; Superior, Blaine, Dewey; Waukesha; Wausau; Whitewater.

Your Board of Inspectors desires to make the following recommendation:

That North and South Dakota be admitted to this Association, and that the High School at Yankton, South Dakota, be placed on the accredited list.

Respectfully submitted,

A. S. WHITNEY,
Chairman.

ILLINOIS : Aurora (East); Aurora (West); Bloomington; Chicago:—Austin, Calumet, Englewood, Hyde Park, Jefferson, John Marshall, Joseph Medill, Lake, Lake View, North West Division, Richard T. Crane, Manual Training, Robert A. Waller, South Chicago, Wendell Phillips, William McKinley; Decatur; De Kalb Tp.; Dixon; Elgin; Evanston Tp.; J. Sterling Morton Tp.; Joliet Tp.; La Salle, Peru Tp.; Lyons Tp. (La Grange); Moline; Oak Park Tp.; Ottawa Tp.; Peoria; Pontiac Tp.; Princeton; Rockford; Rock Island; Sterling Tp.; Thornton Tp. (Harvey.)

INDIANA: Elkhart City; Fort Wayne; Howe Military School; LaPorte; Michigan City; Richmond; South Bend; Shortridge and Manual Training, Indianapolis.

IOWA: Boone; Burlington; Capital Park; Cedar Rapids; Charles City; Clinton; Corning; Council Bluffs; Davenport; Des Moines, East, North, West; Fort Dodge; Grinnell; Iowa City, Le Mars; Mason City; Muscatine; Ottumwa; Sheldon; Sioux City.

MICHIGAN: Albion; Ann Arbor; Alpena; Adrian; Benton Harbor Collegiate Institute; Battle Creek; Bay City; Charlotte; Bessemer; Calumet; Coldwater; Detroit: Western, Eastern, Central, Home and Day, Detroit University; Delray; Escanaba; Ferris Institute; Flint; Grand Rapids Central; Hancock; Ionia; Ishpeming; Iron Mountain; Jackson; Kalamazoo; Lansing; Lake Linden; Marshall; Ludington; Manistee; Menominee; Michigan Seminary (Kalamazoo); Muskegon; Michigan Military Academy (Orchard Lake); Mt. Clemens; Marquette; Negaunee; Port Huron; Niles; Pontiac; Petoskey; Sault Ste.

Marie; Saginaw :—West Side, East Side; St. Joseph; Traverse City; West Bay City; Ypsilanti.

MINNESOTA : Duluth; Minneapolis, Central, East Side, North Side, South Side; Redwing; St. Paul, Central, Cleveland, Humboldt; Winona.

MISSOURI: Columbia; Kansas City Central; Kansas City Manual Training; Trenton; St. Louis McKinley; St. Louis Central.

OHIO: Akron; Astabula; Bellefontaine; Cincinnati; Hughes, Walnut Hills, Woodward; Cleveland Central, East, Lincoln, South, West; Columbus East, North, South; Coshocton; Delaware; East Cleveland; East Liverpool; Elyria; Fostoria; Glenville; Greenville; Lakewood; Lancaster; Mansfield; Marion; Middletown; Mount Vernon; Newark; Piqua; Portsmouth; Salem; Sandusky; Toledo; Troy; Van Wert; Warren; Wooster; Xenia; Youngstown; Zanesville.

WISCONSIN: Appleton; Ashland; Baraboo; Wayland Academy at Beaver Dam; Beloit; Berlin; Chippewa Falls; Eau Claire; Fond du Lac; Grand Rapids; Janesville; La Crosse; Madison; Marinette; Marshfield; Menomonie; Milwaukee, East Division, West Division, South Division, Milwaukee-Downer Seminary; New Richmond; Oshkosh; Portage; Racine; Ripon; Sheboygan; Sparta; Stevens Point; Superior, Blaine, Dewey; Waukesha; Wausau; Whitewater.

Your Board of Inspectors desires to make the following recommendation:

That North and South Dakota be admitted to this Association, and that the High School at Yankton, South Dakota, be placed on the accredited list.

Respectfully submitted,

**A. S. WHITNEY,
Chairman.**

The minutes of the meeting of the Commission on Accredited Schools of the North Central Association of Colleges and Secondary Schools were then read, as follows:

The Commission met at 2 P. M., Thursday, March 30, 1905, at the Auditorium Hotel in Chicago, with Professor H. P. Judson, of the University of Chicago, in the chair. The members present were Professor Joseph V. Denney, and Inspector W. W. Boyd, of the Ohio State University; Secretary G. M. Jones, of Oberlin College; Principal E. L. Harris, of the Cleveland Central High School; Principal W. W. Coy, of the Cincinnati Hughes High School; Professor F. W. Hicks, of the University of Cincinnati; Inspector A. S. Whitney, of the University of Michigan; Principal F. L. Bliss, of the Detroit University School; Inspector H. A. Hollister, of the University of Illinois; Professor W. R. Bridgman, of Lake Forest College; Principal J. E. Armstrong, of the Chicago Englewood High School; Director G. N. Carman, of the Lewis Institute; Professor J. A. James, of Northwestern University; County Superintendent A. F. Nightingale, of Chicago; Inspector A. W. Tressler and Professor F. G. Hubbard, of the University of Wisconsin; Professor H. D. Densmore, of Beloit College; Inspector George B. Aiton, of Minnesota; Inspector J. F. Brown and President G. E. MacLean, of the State University of Iowa; President H. S. Seerley, of the State Normal School, Cedar Falls; Inspector J. D. Elliff, of the University of Missouri; President John R. Kirk, of the State Normal School, Kirksville; Professor M. S. Snow, of Washington University.

Chairman Whitney, of the Board of Inspectors, submitted a report of the work of the Board, which, after discussion was accepted and adopted by the Commission.

A motion that the rule of the Board which recognizes thirty pupils per teacher as a maximum be changed from thirty to thirty-six was referred to the Board of Inspectors.

As the committees on defining units in Zoology, Shopwork, Drawing, Physical Culture, and Commercial Subjects were not prepared to report, they were given further time.

The report of the committee which was appointed "to take into consideration the advisability of extending the work of the Commission so as to include accredited colleges and determine what should be the requirements of the bachelor's degree" was not presented to the Commission because of the absence of the chairman of the committee, President Thwing. It was therefore agreed that this report should be made directly to the Association, as was done this morning.

That the definitions of units may be properly revised from year to year, it was voted that there should be standing committees on definitions of units. That these committees may be properly constituted the Board of Inspectors was asked to submit to the Commission the names of those representatives of the colleges and schools of the Association who are best qualified for the work.

It was voted that schools outside of the states represented by the Association may be added to the

accredited list when approved by the Board of Inspectors.

At the request of President Bliss the Chairman of the Commission appointed the following committee to advise with the President as to appointment of members of the Commission: Messrs Carman, MacLean, Denney, Armstrong, and Seerley.

The Commission adjourned to meet immediately after the adjournment of the Association.

The second meeting of the Commission was held Saturday, April 1, at 11:30 A. M. Professor Judson presided, and the following members were present: Denney, Boyd, Jones, and Harris, of Ohio; Bliss, of Michigan; Judson, James, Bridgman, and Carman, of Illinois; Tressler, of Wisconsin; MacLean, Brown, and Seerley, of Iowa; Kirk, Hill, Snow, and Elliff, of Missouri, and Hodgman, of Nebraska.

Professor Judson was chosen Chairman of the Commission, and Director Carman, Secretary.

The Report on Zoology, prepared by Professor Reighard, was referred to the standing committee on the definition of the unit in Zoology.

The Commission adjourned to meet the day preceding the next meeting of the Association.

G. N. CARMAN,
Secretary of the Commission.

The report on Zoology follows:

REPORT ON ZOOLOGY.

PROFESSOR JACOB E. REIGHARD, UNIVERSITY OF
MICHIGAN.

In the opinion of your committee a high school course in Zoology should have for its objects: (1)

To acquaint the student with the common animals of his own neighborhood, with the various environments of these animals, with the structural adaptations which the animals show to their environment and with their habits and economic importance; (2) To afford training in critical methods of making and recording observations both by drawing and by writing, both in the laboratory and in the field; (3) To teach enough of the interpretation of the observed facts that the student may understand the current methods of interpretation from the morphological, physiological, and ecological standpoints. In other words with the study of the structures there should go an interpretation of their use (physiology, ecology) and of their past history (evolution). An elementary training in both experimental and comparative methods should be sought, and the peculiar value of such training as a means of intellectual development should not be overlooked. Ability on the part of the student to observe and think independently is especially desired.

For a course extending through the year with four periods per week, it is recommended that the laboratory and field work consist of the study of at least ten type forms to be selected from the following lists:

1. An insect.
2. The crayfish.
3. An earthworm, leech, or fresh water oligochaete.
4. An amoeba or other protozoan.
5. Hydra or a hydroid.
6. A mussel or snail.

Second Session, Friday Afternoon.

The Association was called to order at 2:30 o'clock P. M. by President Bliss. The Commission on Accredited Schools through its Chairman, Professor H. P. Judson, of the University of Chicago, presented the following report, which was, on motion, adopted.

REPORT OF THE COMMISSION ON ACCREDITED SCHOOLS.

In presenting the report of the Commission I beg to call attention first to the action of the Board of Inspectors as approved by the Commission. The list of accredited schools for the year 1905-6 is herewith submitted. You will note in the list, in the first place, the omission of certain schools that were on the list for the current year. These omissions do not necessarily imply that the schools in question have failed to conform to the standard. In some cases the school authorities have neglected to make the report which the Commission requires, and the Board of Inspectors, in the absence of the specific reports has been unwilling to act. In some instances this failure to report is due to a change of school authorities; in other instances doubtless to indifference. In either case inasmuch as the list is prepared annually, it has been necessary to omit the schools in question.

It will be noted also that the Board has added to the list a considerable number of schools. In some states the number being practically doubled. The increase will be especially noted in Ohio, Michigan, Wisconsin and Illinois.

The Commission has been much interested in reports of the Inspectors as to the practical working of the plan in the schools. In general it may be said that the Commission found in a number of states that the operation of inspection has been an unquestionable incentive to improvement in the schools. In several states the school authorities have taken action to supply things which were lacking to make their schools conform to the Commission's standard. In some cases the authorities have been willing to reduce the number of classes assigned to teachers, and the number of students in classes. On the whole I am satisfied that the Commission has reason for encouragement and has good ground to feel that the tendency of its work has been towards lifting the standard of work and towards unifying the policy of secondary schools in most of the states concerned in the Association.

Herewith is submitted the report of the Board of Inspectors, as presented by its Chairman, Professor Whitney.

The Commission has given some attention to modifying and improving the definitions in some subjects. Subcommittees are given further time to improve the formulation of the definition in Zoölogy, Shop-work, Drawing, Physical Culture, and in Commercial subjects. It is expected that the Commission at the next meeting of the Association will be pre-

pared with modifications, therefore, in those subjects.

In order that the definitions may be under constant and careful consideration the Commission has constituted standing committees in all the respective subjects. These committees are expected to report annually to the Commission.

The Commission has voted also that schools outside of the states represented by the Association may be added to the accredited list and recommended by the Board of Inspectors.

The committee assigned to take into consideration the advisability of extending the work of the commission so as to include accredited colleges and determine what shall be the requirements for the Bachelor's degree presented a preliminary report which was submitted at this morning's session directly to the Association without action by the Commission. This report of the committee which was read by its Chairman, President Thwing of the Western Reserve University, was of the nature of detailed information as to the requirements for the degree in a variety of colleges.

It is understood that the Commission will take up the subject matter of this report at its next meeting.

REPORT OF THE BOARD OF INSPECTORS FOR 1905.

To the Commission on Accredited Schools:

Your Board of Inspectors desire to report that they have held two sessions and have given careful

consideration to the work assigned them by your honorable body, and herewith submit resolutions that have governed them in their action, together with a list of schools. The following inspectors were present:

Densmore, Beloit College; Butler, University of Chicago; Brown, University of Iowa; Hollister, University of Illinois; Hicks, University of Cincinnati; Elliff, University of Missouri; Whitney, University of Michigan; Aiton, State Inspector of Minnesota; James, Northwestern University; Tressler, University of Wisconsin; Boyd, Ohio State University.

There were no representatives from Indiana, Kansas or Nebraska. The inspector from Colorado was unavoidably detained, but sent complete reports.

The standards that have governed the Board in their actions have been the same as those adopted last year with the following modifications:

Resolved, that the word "enrollment" in Rule 3, be changed so as to read: "Average number belonging."

Resolved, that where there is any reasonable doubt, the board will take the doubt as grounds sufficient to justify rejection.

Resolved, that the McKinley School, St. Louis, Mo., be continued on the list, but that in the future no school will be accepted that has not in actual operation the full four years' course.

The following constitute the list of schools:

COLORADO: Cannon City; Cripple Creek; Denver, West Side; Durango; Ft. Collins; Golden; Grand Junction; Greely; La Junta; Leadville; Pueblo, Central; Pueblo, District No. 1; Trinidad; Victor.

may proceed to a study of the structure of the digestive organs either from his own dissections or from preparations and charts. The teacher may then give elementary instruction concerning the process of digestion. Again observations may be made on the breathing movements to be followed by an anatomical study of the spiracles and tracheae and an exposition of the nature of respiration. Thus in all cases, so far as practicable close correlation should be made between the work on the function and that on the structure of the various parts of the body.

The work in which the student can actually see the working of the part observed will of course have to be followed by a study of the parts whose function is not so obvious, but the same principle of correlating structure and function may be followed throughout. It is advisable that the work in which the teacher supplies most of the physiological instruction should follow that in which the pupil is able to make his own observations.

The class should next make a comparative study of the different grasshoppers collected so as to be able to distinguish the different species in a second field excursion. When a good conception has been gained of the general structure of the body and of the chief functions of its parts and when a sight recognition of the local species of grasshoppers is assured, attention may be directed to the life of grasshoppers in the field and to the adaptations shown by the various species to their conditions of existence (ecology). To give an illustration of the nature of the ecological work that may be undertaken advantageously in the high school, we may cite the follow-

ing observations which may easily be made upon the grasshoppers which occur in nearly every neighborhood. The kind of situation should be noted in which each species occurs. The students should observe the relation between these habitats and the species found in them, the instinct of the roadside grasshopper to alight in barren spots of ground and of various species of green coloration to alight on grass stems and to keep on the side opposite the observer; the instinct of other species when alighting in the grass to drop down and remain quiet next the ground. These and many other features of behavior which show a marked adaptation to particular kinds of environment can easily be observed and interpreted. If the teacher directs the attention of the students to such phenomena and by carefully planned questions leads them to make and to record observations of their own, work cannot fail to prove of interest and value. Such work if properly planned can be controlled as well as tasks performed in the laboratory.

When the field work on the grasshopper has been completed the class should take up the insects on the first field excursion and should become familiar with the principal groups of insects. At this point attention may be directed to the economic value of certain species. Here again opportunity will be afforded to stimulate individual work and the making of collections.

The same plan of work may be followed in considerable detail with the mollusca. In the case of other groups the field work may need to be considerably modified. Thus birds and mammals may not be collected but both may be studied in the field.

Protozoa and hydra may be collected but are not, of course, suitable for field study. In the case of each type the plan outlined should be followed in so far as the nature of the material permits. It is believed that in the laboratory the plan is feasible in nearly every case.

Both laboratory and field work are best carried on by means of written or printed directions prepared by the teacher. Just before each field excursion the teacher should visit the locality selected for the field work in order to be assured that the desired material is available and that the observations outlined are feasible.

The class room instruction should co-ordinate and extend the work done in the laboratory and further interpret it. It is believed that the further work carried on in the class room may be best done by means of topics to be studied in connection with those laboratory types which best illustrate them. Thus in connection with insects, protective coloring and mimicry as well as the general subject of metamorphosis may be enforced and illustrated. In connection with the frog the development should be studied in the laboratory, and general notions of development added to those of metamorphose. In connection with the mollusca, variation and the ideas of species may be enforced. Instinct and intelligence may properly be considered in connection with several of the types. Toward the end of the course, time should be left for a connected presentation of the doctrine of evolution and of natural selection.

Your committee wishes to call attention to the importance of proper field and laboratory notes and

drawings. Notes, both in field and laboratory should be made while the work is in progress, not afterward. They should be criticised by the teacher with reference to their pertinence and completeness and should be permanently preserved. Such notes may be made the basis of more careful reports which should be criticised not only with reference to the arrangement of their contents, but also to the character of their conclusions and their English. It is suggested that teachers of English will often be found willing to co-operate in the correction of such reports. Drawing is of no less importance than note taking. Drawings should be made chiefly in the laboratory and always from the specimen. It should be the object of the teacher to see that the drawings are accurate and that their details have meaning. Meaningless or ambiguous lines or mass of shade have no more place in a scientific drawing than meaningless words in a sentence.

Your committee wishes further to call attention to the importance of local school museums. These should contain primarily representatives of the local fauna attractively displayed. Students may be referred to specimens in such a museum as they are referred to books and may use the museum as they would a library. The Michigan Academy of Sciences maintains a bureau, the purpose of which is to secure for teachers and others the identification of specimens collected by them and their exchange for other specimens. Information concerning the bureau may be had from the Secretary of the Academy, Professor Charles E. Marshall, Agricultural College, Mich.

Your committee makes the following further recommendations:

1. That the course be put in the second high school year, rather than in the first and that it be preceded by a course in physiography. Such an arrangement should greatly help the teaching of field ecology.
2. Each week's work should consist of two class exercises and at least two laboratory exercises. Each laboratory exercise should consist of at least two school periods and these should if possible be the last two periods of the afternoon. By this arrangement it will be possible to use the greater part of the afternoon for field excursion.
3. Where but half a year's work is offered in zoology the teacher should select the groups to be studied. Since the groups do not require equal periods of time, the number to be studied in a half year's course will depend on the selection. It should not be less than five.
4. Where but half a year's work is offered in zoology and where at the same time human physiology is taught the zoology should be followed at once by the physiology or the two subjects should be combined into a single course. It is believed that time will be saved by this arrangement and that interest will be added to both subjects.

PRESIDENT BLISS:

The hour has now arrived for beginning the Conference on Graduate Work in American Universities. This Association has done much to secure unity of action in the north central states, while eastern institutions have done much towards preserving high standards. We are especially favored to-day in hav-

ing with us a representative of one of the oldest and best tried of the eastern universities, who will address us on True and False Standards of Graduate Work. I have great pleasure in introducing Dean Andrew F. West, of Princeton.

DEAN WEST:

I trust it may not be inappropriate before reading what I have to say if I express the sense of strangeness in coming to an educational gathering in Chicago and not seeing President Harper. I desire to express the unstinted admiration I am sure we all feel for his heroism in his sickness.

TRUE AND FALSE STANDARDS OF GRADUATE WORK.

DEAN ANDREW F. WEST, PRINCETON UNIVERSITY.

We need not stop to prove at the outset of this discussion that the liberal arts and sciences are and must be the central and regulative part of every true university. This body of studies alone, taken in its entirety, presents us with the nearest approach to a system of pure knowledge of universal value, ever improving, self renewing, growing slowly clearer, more complete from age to age. It represents to us, as no other body of studies can, the sum of things best worth knowing by men whose object is to follow truth for its own sake, not as a means for obtaining a living, nor for social and political gain, but for the sake of ordering their lives in accordance with the highest ends. It was not without some glimpse of

this truth that mediaeval letters referred to the universities of Paris and Oxford as "the two eyes of Christendom," nor was it without like insight that some of the oldest university documents began with the phrase "We seek the pearl of knowledge, of great price, in the field of liberal studies." And what was thus true of universities at their birth has been true in every generation down to our own time and is evidenced in many ways,—as, for instance, in the fine declaration of Hofman in his address as Rector of the University of Berlin, wherein he figured the liberal knowledge enshrined in the Philosophical Faculty as "the Palladium of the Ideal." And so it is. Watch the wavering fortunes of university history. No deterioration in the purity and strength of intellectual standards has taken place without affecting injuriously these studies. No great wave of commercial, technical, or other utilitarian influence has swept on unchecked into university life without disaster to university ideals. And no great period of intellectual illumination and advance has come to any university in all the time of recorded history except through the self-sacrificing devotion of men to the cause of knowledge as embodied in or, at least, as closely related to the distinctively liberal arts and sciences. This has been our guiding light always.

"And when it fails, fight as we will, we die;
And while it lasts, we cannot wholly end."

A university may have, and a complete university must have more than this central faculty of arts and sciences. The professional and technical schools which properly round out the circle, so far

from being despised as parts of a university, are the great appliances which connect the ideal centre of knowledge with the practical needs of the world. A law school, a medical school, an engineering school, all derive immense benefit by being placed in proper relation to the central faculty of arts and sciences, and give back many benefits in turn. But no aggregation of professional and technical schools makes a real university, because such an aggregation lacks its vital centre, its faculty of arts and sciences, which alone can maintain the universal standards of knowledge in all their exactness and rigor and thus relate and steady the particular standards of the professional and technical schools.

The liberal arts and sciences fall into two sections. The first or lower section is the undergraduate college course of study, the one thing in our higher education which is best worth preserving, for this alone furnishes the best basis, which is always desired, though not as yet generally taken, for subsequent university study whether of liberal or professional character. So I need not argue in this presence that to preserve and develop the undergraduate college education in its purest form is to do an indispensable service to all forms of graduate study.

Let us turn at once to the graduate work and confine our attention to the other section of the field of liberal studies. Professional and technical studies may in a sense be depended on to take care of themselves. They will always flourish so long as men are seeking to be educated in order to make a profitable living. But graduate work in liberal studies cannot be maintained on this basis, because the end aimed

at is different. For if the pursuit of wealth or station is the end aimed at by a man who thinks he is giving himself to the life of a scholar, he is not aiming at a scholarly end. Consequently in order to maintain its own standards a true graduate school in the liberal arts and sciences must depend on something else to sustain it. The moment it becomes an employment bureau or an agency for finding places, a sordid motive enters, and it is in danger of ceasing to be a school devoted to the cause of truth and knowledge. Unless, therefore, the life of the scholar is to appeal to men not primarily as a means of livelihood, but because they cannot help following the scholar's life, we have no sufficient basis for justifying the maintenance of this all-important school. And if this school perishes or becomes degraded, you may be very sure that sooner or later every valuable function of the university will be injured.

I suppose we can all accept heartily the statement that the chief business of a university is to maintain standards,—to determine, inspect, and certify the intellectual and moral weights and measures. I do not doubt we can go farther and agree in asserting that this maintenance of intellectual and moral standards is acutely needed in our own nation at this time when its material interests are becoming so vast and complex. And this, more than all else, is the peculiar and pressing duty of every graduate school in liberal studies. Here the higher teachers of the nation are being trained. Here the influences which make for truth and reason are or, at least, ought to be most pure and uncontaminated. The service to be rendered is priceless, the need is urgent,

and the fact that our graduate schools in liberal studies properly planned and guided are specially fitted to render this service is the fact which justifies their existence.

It therefore becomes a matter of the first moment for us that the standards of graduate work should be maintained in as much purity as our means and intelligence permit. We know they will not be perfect at the best, but we also know that if we maintain them at a lower level than we ought, even according to our own imperfect conception of duty, there is nothing to keep even our existing standards from deteriorating. The duty of self-criticism is therefore ever with us, not only if we are to improve, but if we are to keep what we have. I therefore ask you to look for a little while at three aspects of this question of true and false standards in graduate work,—namely, our standards of knowledge, our standards of expression, and our standards of judgment.

1. The standards of knowledge in graduate work are especially threatened just now by the antagonism of an unenlightened specialization. This is not only the curse of the specialization which does not rest on a sound general education, but in a degree of all specialization which does not limit the subdivision of studies by some consideration of the intrinsic value of the thing studied. What knowledge is of most worth? is the fundamental question which tests every graduate study and every graduate student, as it does everyone who professes to be a thinker in any field of knowledge at any stage of his life. It has now become a very fair question whether the

subdivision of topics has not gone so far that not only the perception of relative values is clouded, but even the community of intellectual interests among our higher students is being destroyed. Certainly some of our scholars seem to be subjects of some petty principality rather than freemen in the commonwealth of knowledge.

It is a matter of common remark that many of our rising students in science are only too ignorant of literature, many philosophers ignorant of science, and many literary men ignorant of both. But this is not the full extent of the trouble. Many men, whether in science or philosophy or literature or history, are unacquainted with and utterly uninterested in either science or philosophy or literature or history as a whole. We may subdivide still more and find that one philosopher is a logician only, one scientific man a biologist only, and some other scholar a classical philologist only. Would that we could stop here, but we must go on until we discover that there are many who are familiar only with some subdivision of a division of their logic or biology or philology. They may be known by two characteristics: the first is their intensive knowledge of a small portion of some subject, which is all very well, and the second is their extensive ignorance of everything outside that small portion of their subject, which is not well at all. How vividly it brings out the point of Montaigne's satirical story. As he rode across the plain one morning he encountered a company of gentlemen and said to them "Good morning, Messieurs," and the leader of the company sharply replied "We and not Messieurs; my friend here is a grammarian

and I am a logician." Were these worthy scholars living to-day perhaps they would not be able to profess even so much. The one would likely be a student of some little part of syntax and the other the exploiter of a mechanical device for grinding out some special results of the use of the syllogism. This may be well enough, provided the specialist is not making it the end of his intellectual life, provided he constantly realizes that the only valuable specialization lies in studying the general in the particular, and that the relating of an accurately determined particular to the general is the only thing which gives the results of specialized study their place and shows their size in the general body of valuable knowledge. We are not objecting to specialization — far from it — but solely to the study of the unimportant. And this may take many forms. It may take the form of investigating something which when ascertained is found to be a trifle. Or it may take the form of solemnly proving the obvious by an elaborate array of statistics, as when we are shown conclusively by tables of percentages, which have been tested and re-tested, that a given number of children born and bred in the city, compared with the same number born and bred in the country, show less knowledge of the different kinds of plants, grains, birds and beasts than do their rural compeers. Of the same nature is the proof I read recently, showing minutely and beyond the shadow of a doubt that in the domain of "child psychology" there was a marked distinction between the preferences of young boys and girls for animal pets, more girls than boys preferring birds, and that unkindness or cruelty to an animal was

from thirty to fifty per cent more shocking to a girl than to a boy. Does one need to pursue higher university studies in order to know this?

A force which is always operating to increase the perplexities of the situation is the mania for publication. It is assumed that production of original results, published so all may have a chance to read and test them, is a necessary mark of the higher scholarship. Pressure is therefore constantly felt by the aspiring young candidate to justify himself in the eyes of other scholars in this way. Our embryo Doctors of Philosophy must write and print a dissertation. This again is very well, if the man who is writing the dissertation has a sensible mind and is writing about something that needs to be made known. But what has come to pass? Another deluge! The number of reviews, scattered articles and contributions of every sort in any one great subject such as biology, or history, or chemistry, or classics, is so great that it is doubtful whether any human being can read in ten years the output in any one of these subjects for one year. The vast mass of publications is piling up unsifted, unorganized, and therefore unavailable to a large extent for future use. It reminds us a little of what Carlyle said about the voluminous archives of the French Revolution: "The French Revolution consists of some tons of manuscript slowly rotting in the European libraries."

The menace to our standards of knowledge offered by intemperate specialization is thus increased by a false notion as to what scholarly productivity is. It consists not only in the advancement of knowledge, but in the diffusion of knowledge, and above all,

it consists primarily in the advancement and diffusion of the more valuable knowledge. And, in passing, let us ask, how anyone can fail to see that the question whether a certain body of knowledge is new or old has in itself nothing to do with the question of relative values. Furthermore, in the forming of a great scholar by the close personal touch of his master, there is a far nobler form of productivity than the writing of even an important dissertation. As a rule, the best "collected works" a scholar can leave is a group of great students. In the light of such considerations, it is not clear that the integrity of our standards of knowledge is being menaced? The pure white light is being broken into the many beams that compose it, and many there are who see not even so much as one whole color, but only some one hue of that color in the great spectrum. The clear organization and evaluation of the knowledge we now have seems at the present time of more importance than all the stray advances hither and thither.

Our standards of knowledge therefore need to be centered in the general body of ascertained truth. We must take our position, in the words of Francis Bacon, that "philosophy and universality are not idle studies," and we must carry this so far as to believe that only in the light of the universal shall we understand the worth and bearing of the particular. And as the only available practical help towards securing this attitude of mind in our graduate students we must insist on a clear and pure preliminary training in liberal college studies, followed by such a training in their graduate work as constantly keeps them in touch with the community of intellectual in-

terests outside their special field of study. And to secure this in turn we should aim to secure as graduate students only men of strong all-around ability, open vision, and wide sympathies. In short we must, first of all, secure the right kind of man as a graduate student. Having done this, we may rest assured that all the other desirable results may be made to follow.

2. When the harmonious standards of general knowledge are lost sight of, particular standards suited to one or another specialty are apt to take their place. Partly as a result of this there comes a corresponding change in the standards of expression. When the broad view is lost, simplicity and universality of statement, and a consequent attractiveness and beauty of presentation, are apt to suffer. It is not enough that a book or dissertation in the field of scholarship be accurate and painstaking, if it is to survive in the recollection of men. As we review in thought the books and papers which have made a mark on the intellectual life of any period, it is easy to see that many able contributions to knowledge have passed into oblivion because they were not engaging and readable; whereas one of the distinctive marks of the finest class of such compositions is their convincing charm of style. These are the classics of science and philosophy, as well as of literature. A scientific writer who has the artist's sense has thus an advantage over his equally able rival, and sometimes over his abler rival who lacks this sense. Now one of the most evident faults of the mass of specialized publications which now occupy the main place in our literature of scholarship is a sort of solemn pedantry. This springs from the entire subordination

of the writer, his restricted theme, and to the particular technique of language which belongs to his specialty. He does not dominate his subject, but is mastered by it. He therefore writes too much in a dialect and not in a literary way. He becomes dry and lifeless. Of course every subject and every subdivision of a subject has its own furniture of ideas and must make use of the technical words which alone set forth these ideas accurately. But this has been fearfully overdone. If it sufficed a Newton to define the elusive atom, whether rightly or wrongly is of no importance here, as "the least part of matter," ought we not to take courage from his example and insist that technical terms, except when necessary, and highly formal language, and in fact all forms of swollen diction, be excluded from the scholar's writing? The difficulty of the ideas is sufficient without enveloping them in a fog of words. Let us somehow manage to keep the common store of pure English as the one treasury to which we resort for everything common English words can express. In this way alone shall we be able to preserve a general reading interest which will steadily connect the publications in one department of knowledge with the publications in another. Descartes has said that clearness is a test of truth. Without going so far as to reverse this and to assert that obscurity of statement is evidence of error, we may at least use the maxim as a warning to all men who are prone to write in a formidable technical dialect.

One other thing may be said in this connection: Pretentiousness of any sort is unscholarly, whether it be in the form of conceit as to the value of one's

own thoughts or in the form of grave pedantry in proclaiming them to others. And, lastly, on this point it may be asserted that the man who is a slave to a technical terminology is in constant danger of getting away from the concrete truth of what he is studying into a region of artificial construction where he is so much occupied with the scaffolding and outer appliances that he mistakes work on these for work on the real building.

3. Back of all standards of knowledge and expression in the scholar's life lie his standards of judgment. On these more than on anything else depend the genuineness and permanence of what he does. We may leave geniuses aside in this discussion, because there is no use or need of legislation for them, and after all they are very few in number, supreme as their distinction is. And yet, even in the case of geniuses, we shall find more instances of sound common sense than might be expected. But what of the mass of scholars? What is to be the ultimate guarantee of mankind generally that their work is intrinsically valuable, whether it be brilliant or plain, extensive or limited, commanding or humble? What but one thing? the possession of sound judgment. Faraday somewhere writes that the education of the judgment is the chief benefit of a scientific training, and Huxley has told us that scientific ability in its last analysis is nothing less and nothing else than "trained common sense." How this throws us back on the personality of the man whom we are to encourage to be a graduate student. It thus becomes primarily the question not of what he can know, how he can express it, or how much he can do, but what

kind of a man he is. The reasonings and conclusions of a vain man will be tinged with vanity. The judgments of a man "deep versed in books, but shallow in himself" will not permanently appeal to the respect of his fellow man. The capricious or adventurous or self-advertising scholar is, so far forth, not a true scholar. The fate of our higher studies, in their effect on the men we influence, depends first of all on what kind of men we are. The kind of scholar any man is to become, so far as the abiding value of his influence goes, is determined in the last resort not so much by what he knows or says as by what he believes and loves. He must have the lover's instinct, almost the art of divination. Like the miner, he must have the eye that knows the ores of gold from fool's gold. The student who naturally longs to know the things of most worth, and searches for them in all simplicity and sincerity, and purposes to turn all to the best account by making his acquirements accessible and serviceable to his fellowmen, is the only kind of man who ought to be encouraged to enter our graduate schools. And this kind of man is most naturally bred in the comradeship of our college life and in the atmosphere of liberal studies. What a mistake to fail in any way to make our graduate schools supremely attractive to just this sort of man. Given the personal qualities indicated and a suitable college training, and on top of this a life in graduate studies environed by the friendships that arise from the constant interchange of ideas between men studying in different departments of knowledge, how can the young scholar, so circumstanced, fail to develop that "trained common sense," that well-poised judg-

ment which must enlighten all his thinking and all his doing if he is to be the scholar we are describing.

It has often been debated whether the theoretical or practical mind is the higher type. If the terms are used in their proper sense, it seems to me there can be only one answer: The practical mind is the better, because sound judgment, which is essential to all sane scholarship, is an eminently practical thing. It is this that transforms knowledge into wisdom. The brilliant theoretical scholar, without this balance, is structurally weak. But let us not misunderstand what this practical mind is. It is not cut off from theory. In fact the highest practical scholars are those most deeply grounded in theoretical knowledge, but they differ from the merely theoretical scholar in being able to use that knowledge steadily in applying it to the best advantage, and consequently the man who is a practical scholar in this sense is the only one who unites the best traits of the theoretical and practical mind. So when we see men of flighty judgment, erratic purposes, and unsteady effort, let us keep them out of our graduate schools as surely as we keep out the drone or ought to keep out the dullard.

At this time, more than ever before, business and professional life, with their attractive careers and dazzling rewards, are taking most of the able men of the country. The attractions of the scholar's life are not relatively as great as they were a generation ago, nor is the honor paid to the scholar so great in our land as in the older civilizations of Great Britain, France, and Germany. And yet on the little band of scholars in the liberal arts and sciences depends,

more than ever before, the tone of our nation in things intellectual and moral. We have already too many second-rate and third-rate and fourth-rate men among our scholars. We shall never be short of these. But on our graduate schools in the liberal studies rests the supreme privilege and duty of standing more resolutely than ever for the best standards of knowledge, expression, and judgment, so that the small company of picked men who are best fitted by reason of their high manhood to become our best scholars will naturally resort to our graduate schools and lift them, and with them, the higher American scholarship, to a level never attained before. And may we live to see that day !

A discussion followed on "Aspects of Graduate Work," by President Geo. E. MacLean, The State University of Iowa; President Edmund J. James, University of Illinois; Dean Edwin A. Birge, University of Wisconsin, and Dean Albion W. Small, University of Chicago.

SOME ASPECTS OF GRADUATE WORK IN STATE UNIVERSITIES.

PRESIDENT MACLEAN, The State University of Iowa:

In listening to Dean West, imagine my suspense and interest. Unlike the character in the famous story of "The Lady or the Tiger," I have been standing in the arena sure that when the door opened, as the Dean came from Princeton, it would be "The Gentleman and the Tiger." Admiring the inimitable

style of Dean West, and the clearness with which he has presented his position, I must however, confess I am glad I am not placed here for a general discussion of his paper; because first, I would feel incompetent, and second, I would have to lament the untimeliness of the presentation of certain doctrines. They fall in with certain popular sentiments fostered in this period of commercialism in the West, that only a few should go on to the highest education. Unwittingly therefore, the Dean's paper is bringing "coals to Newcastle."

A group of us who have given years to preparation in order that we might learn how patiently to investigate and to teach lessons of research, are likely to be discouraged. We have hoped that we had a mission to direct the fruits of prosperity to endow opportunities to secure exact training and American leadership in thought. America has brought forth too few scholars. The age of scholarship has yet to come to us. We have hoped that the time was at hand when the gifted and patient boy born upon the prairies, might be encouraged to enter upon the highest educational advantages without being forced to go to European countries or even the Atlantic seaboard. We recognize that the university movement as distinguished from the collegiate, dates in some sense only from 1876, the time of the foundation of Johns Hopkins, or the efforts from 1869 of President Eliot at Harvard, supplemented later by those of President Dwight of Yale, and of our heroic Harper in the West.

While we may with some justice smile at the mediocre, cock-sure doctor of philosophy of a decade

or two ago from the German university, we have come to need the unpretentious, as over against the brilliant scholar in our great hive of American industry. We need them in larger numbers than others may build upon their painstaking work. We rejoice that there is a prospect that we may have them when we consider especially the subject assigned to me, of "Some Aspects of Graduate Work in State Universities."

It is encouraging for the true scholar that the state universities, peculiarly people's institutions planted in the different part of the country, have begun to evolve, as over against collegiate or merely professional, graduate work that will meet the test of the true and false standards set out by Dean West. Something of this will appear in the facts contained in a paper presented by Dean Hellems of the University of Colorado on behalf of President Baker at the recent meeting of the National Association of State Universities in Des Moines. The paper rests upon 177 replies to a questionnaire.

"The last topic, graduate work in the university, evoked some suggestive replies. A very few respondents thought that the State University ought not to undertake graduate work, assigning such reasons as these :

1. Too costly.
2. Would discourage private benefactions.
3. Would needlessly duplicate work already done.
4. Would lead to neglect of undergraduate work.
5. Would offer too much political temptation, etc.

But on the whole, the replies were preponderantly in favor of the development of graduate work in the state universities as rapidly as possible, not only for its own sake, but for its influence on the undergraduate teaching. One experienced president pointed out that the departments which manage to keep going the most graduate work do also the best undergraduate work. Of no small interest was the fact that not a few of the smaller institutions felt that the state universities should aim at making the graduate work their primary consideration. President Eliot suggests, "This seems to me a question of *most acceptable* expenditure,—a graduate school is for a few at a heavy cost." President Plantz of Lawrence goes to the center of the question with his doubts whether the state has a right to tax the people in order to educate men in specialties. "It would seem," he says, "that men who have been given a college course could pay their own bills for advanced work." In other words, ought the people bear the expense of research instead of leaving it to generous philanthropists? To these questions the man who knows the American people must believe that time is bringing only one answer. As a teacher I may be allowed to say that to most of us the graduate work we can manage to do is a sort of intellectual and educational hill-climbing from which we return with broader mental horizons, feeling more fit and vigorous for our other teaching.

The state universities should develop graduate work as rapidly as their resources will permit. The people will submit to taxation for research, partic-

ularly if it is treated as part of a helpful state institution."

In these north central states, out of 13 state universities, 11 are doing graduate work, and many of them have been growing in it for at least two decades. Of these 11, it may be stated without any invidious discrimination, that not less than six are doing general graduate work. Three or four of these universities have organized separate genuine colleges with their deans and faculties. It would perhaps be entirely proper to mention that universities like Michigan and Wisconsin have taken a foremost place, and modesty shall not forbid me saying that in Missouri, Nebraska and Iowa, there are graduate colleges with an attendance in at least two of these institutions, of nearly 200 graduate students in residence. Thus the state universities in the mid-west have responded to the demands of our American civilization, and this work has been well inaugurated.

I have in my hands a paper by President Thompson of Ohio State University on the subject, in which he states so clearly the principle that constrains state universities to enter this field, and the principle that indicates what must be the future development of this work, that I beg to read a paragraph:

"I suggest the propriety of suggesting to ourselves the fact that there is a common purpose in all of these state universities. They are the people's institutions which must represent more efficiently than any other class of institutions do, the great doctrine of education for the masses. These institutions are founded in the belief that higher education

Borne upon the bosom of the United States this graduate work in state universities and colleges has come to a second stage of growth. The United States Department of Agriculture, when Mr. Morton was secretary and our good President Dabney was assistant secretary, prepared for the gathering of a group of research men at Washington in that department. This has really been done by Mr. Secretary Wilson, so that we have practically university fellowships and the germ of a real University of the United States springing out of the Department of Agriculture.

The future therefore, of graduate work in each of these state universities, crowned by the work at Washington, seems assured. The states have been tempted to follow the example of the United States in liberality in fostering what in the end will not simply yield practical fruits, but the spirit of research. The mercenary spirit of our day may be stayed, if not put to shame. The scholar will take his place beside the man of affairs. These graduate colleges, now relatively small, will give an uplift to our democracy. Some of the men in the small and detached colleges are anxious as to their future. Many of us in the universities sympathize with them. Is it not possible that the ancient ideals of the colleges will ultimately be saved as they are reinforced from university fountain heads located in each great state? The graduate colleges must help to save the old college and its spirit.

The discussion was continued by President Edmund J. James, University of Illinois. [Owing to a mistake on the stenographer's part no satisfactory

report of President James's remarks was made, and rather than present an unsatisfactory report it is deemed best to omit any attempt at an abstract.—Secretary.]

DEAN E. A. BIRGE, University of Wisconsin:

The Secretary of this Association invited me to speak on graduate study in state universities. I am sure that I should not have had the courage to accept his invitation had I known that I was to be preceded in the discussion by two presidents of state universities who are so fully in sympathy with graduate study and so well able to express their ideals and whose institutions are so distinguished for success in that department of education. As it is, there is little left for me to do beyond expressing my concurrence with what they have so well said, and to add a few more or less rambling remarks by way of supplement.

I have perhaps one advantage over either of my predecessors in that my entire active life as teacher has been spent in a state university whose development I have watched for nearly thirty years, a period which covers the entire history of graduate study in state universities. As a result of this experience, there has come to me—and I think to all of those who have been thus associated with the work of state universities—the firm belief that graduate study and research belong to these institutions. Indeed, we feel that these higher departments of education are peculiarly the province of the state university. We believe that it is preeminently the duty of the state, as represented in its educational institutions, to carry on this higher work, whose main value lies in the estab-

lishment of present conditions for successful thought and life in the future rather than the conditions of more immediate, and, therefore, temporary success. The commonwealth which looks forward to the life measured, not by years, but by centuries, whose continuous prosperity depends in so large degree on an intellectual life, vigorous and widely diffused, must provide in its school system for research and graduate study, not as an educational luxury, but as a necessary means for its own permanent growth and happiness.

We are convinced also that the state universities have felt their duty to the state in this respect and that they are endeavoring to perform it. They have doubtless made mistakes in their efforts to accomplish this new and great task. Their graduate work is still open to many criticisms and will long remain in this condition. But they have seriously undertaken the work of developing graduate departments for the service of the commonwealth. They are trying by research and by training men for research to advance the material prosperity of the state, to better the conditions of social life, and, as their highest and most important duty, they are attempting through research to furnish for the intellectual life of the community new and larger tasks and higher ideals of service and duty.

The state universities, like all other institutions in this country, trace the beginning of serious graduate study to the influence of Johns Hopkins University. In several of the state universities, as in others of the larger colleges of the country, graduate study has a longer history, but the vigorous life of this de-

partment in any institution hardly goes back to an earlier period. In each of those universities—state or privately endowed—graduate study has had its own development. But in the state universities as a body there are certain common conditions which have given a like character to this development and which have made the standards of graduate study in those institutions somewhat different in emphasis, though not in essence, from those set forth in Dean West's brilliant paper. Of some of these common conditions and their results I will briefly speak.

In the first place, the establishment of the agricultural colleges by the United States government, and the establishment, at a later date, of the agricultural experiment stations, brought to many of the state universities a number of investigators. Not infrequently it happened that the first members of the faculty whose work was directed primarily to investigation were those appointed on one or the other of these foundations. The example and influence of these men have been among the most potent forces in the faculties tending to the advancement and increase of research and graduate study. As a result of this experience, the state universities have not felt that distrust of technical study which seems to be present among some of our eastern sisters. We have found that the spirit of scientific research belongs as clearly and strongly to these representatives of technical departments—"bread-and-butter" departments, if you choose so to style them—as to any of the departments of pure science, or of letters. If it were my duty to count on the fingers of one hand those persons whom I have known in whom the spirit of

research and of graduate study was present in its clearest and purest form, I am sure that I should be obliged to name two, if not more, representatives of agriculture and engineering.

Second, the position of the state universities, as representing the state and as members of a state system of education, has entailed upon them peculiar responsibilities and duties in regard to research, as well as in other educational matters. As members of a system, these universities have not been free to detach themselves from the general educational conditions or from the necessities of the states which they serve. The terms of admission to the college course, for instance, must be placed, not as the faculty might desire, but such as can reasonably be attained by the high schools of the state with which the institution stands related. And, on the other side of the college course, the development of graduate study must be in directions and in a proportion which will adapt it to the needs of the community and which will not injure the other duties which the state university must perform. A state university, for example, could by no possibility follow the example of Johns Hopkins or Clark universities, postponing the founding of the undergraduate department, or placing it in the background as subordinate to the graduate school. The undergraduate course must be strongly developed, both as the completion of the high school courses and as the basis of graduate study; and, since the great majority of students who attend our universities are undergraduates, it follows that the larger share of the funds granted to the state universities must be used for undergraduate instruction,

and that graduate instruction is not unlikely to be developed more slowly than in those institutions whose primary purpose is research.

Again, the state university has not completed its full duty when it affords an opportunity for making scholars through graduate study. It is responsible both to scholarship and to the state. It is the task of the university which represents the state to develop the spirit of research in the community and in the state; or, at best, to make the people see the value of research, not merely as aiding the material advancement of the community, but as fostering and developing its intellectual life. The state university has failed in its most important task unless it can make the people see that in research lies much of the future of the state, both material and intellectual, and that in providing training for research the state university is performing a most necessary function for the good of the commonwealth.

Thus graduate study in a state institution differs somewhat in its relations, both to undergraduate work and to the public, from that which it holds in an institution on a private foundation, and if one were to discuss the standards of graduate study from the view of a state institution, he would, I think, express them somewhat differently from the way in which they were stated in the very admirable address with which this discussion was opened. For example, I believe that to be in the highest degree successful, the graduate school of a state university must become a large one. A very small number of graduate students, however choice they may be, cannot touch the life of a state at so many points as to

make the graduate school efficient in the service of the public. The state demands research in many directions and of many kinds, which such a school cannot give. The state university must furnish men to meet these demands and to supply these needs, and I am not sure that I believe that the best results in graduate study would be reached by establishing standards for admission to the graduate school so high that only a few select individuals could meet them. If we who are members of university faculties were omniscient, it might be well for us to build walls and set up gates and ourselves act the part of vigilant doorkeepers as candidates for graduate study present themselves for admission. Yet I question whether this method would secure better results than would be reached by a liberal one. If we could tell by the looks of a graduate, or by any examination paper which we might set, whether, or not, he would in three years develop a capacity for investigation, we should doubtless spare much time, trouble and money by applying such a test, but at present there is perhaps no better way than to set him at work and let the progress of events decide whether he will succeed or fail. In such a method we follow the plan of nature. When the Creator made the world he could find no better way of determining success than that which natural selection affords, and we shall hardly improve greatly on the method of creation. I believe that a trial would show that the larger number of conspicuously successful investigators would be produced by admitting to graduate study all who seem to be worthy of a trial, and allowing success or failure to be determined by the ability of the in-

dividual to avail himself of opportunities freely offered to many. At the best, it will always be true that "many are called but few are chosen," and if we make the first phrase to read, "few are called," I fear that the choice will be few indeed.

I believe also that it is quite possible to place too high our ideas of the kind of work which will be done by the average man trained by graduate study. The advancement of knowledge, like the advancement of life in any of its greater aspects, offers all kinds of tasks. It needs day laborers, as well as great and inspiring leaders. A university which does its duty toward research must train and send out into this field many laborers, skillful in their work and performing it with pleasure, satisfied because, though their capacities are not those of leaders, their daily toil adds itself to the forces which are making for the advancement of learning.

You will note that I have spoken of research rather than of graduate study. The two ideals which underlie higher instruction are those of culture and research. No graduate school can become great if it fails to embody both, yet the position of the state university makes it certain that the ideals of research will be dominant.

If the state universities are to send out many laborers into the field of research, it is impossible that they should not add largely to the amount of printed publications. I am peculiarly in sympathy with the words of the principal speaker regarding the flood of papers which appear in all departments of knowledge and threaten to overwhelm us. My sympathy is all the closer because in no department of

knowledge is this flood greater than in that of Zoology. The *Concilium Bibliographicum* spawns upon us annually almost countless thousands of reference cards in that subject — so many that our departmental fund is impoverished by the necessity of buying card-catalogue cases to contain them. The mass of papers thus produced is well styled appalling; yet whenever any one of us undertakes any piece of research which involves the compilation of what others have done in the same field, does he not find that too little has been written rather than too much? I heard this morning at the meeting of the Association of Naturalists an admirable paper on the geographical distribution of fishes in the river system of South America, in which the author attempted, in part, to read the history of the physical geography of the continent through the information furnished by the distribution of the fishes. It was a paper dealing in generalities and in large views of nature — just the kind of paper which we all delight to hear. Yet at many most important points the conclusions of the speaker were maimed by the absence of knowledge of the facts. The fishes of this or that river had not yet been listed, and consequently it was impossible for him to work out the history of the river or perhaps of the river system. Is not the experience of every one exactly like this? Whenever some large subject is attempted, the flood of literature is found to contain only a very small part of the information which is needed for the task. The obtaining of this information is mainly hack-work, not particularly elevating nor particularly inspiring, yet it must be done by men who are trained in the

methods and in the spirit of research and who are so thoroughly filled with that spirit that they are willing to do hack-work for the advancement of knowledge. The labor of the master in any field of knowledge must depend upon the toil of many journeymen, and the graduate school must furnish not only the masters but the journeymen of research, and journeymen who will do their work thoroughly and well. I cannot, then, regret the flood of publications in the various departments of knowledge. I rather welcome it. I expect, as a matter of course, that the great majority of these publications will be of temporary interest only. They will be forgotten and the names of their authors will be forgotten long before a decade has elapsed; indeed they will hardly be truly known. Yet on the presence of this mass of relatively unimportant papers depends the existence of the masterpiece of science, which will endure for many generations. Without these neglected papers and forgotten writers it can never be produced. The state universities, feeling profoundly the need of enlarged knowledge in every field of life, cannot help adding their part to the great number of papers which have temporary value only. I hope that they will contribute their share of the more enduring results of research.

In still another point I find myself in entire sympathy with the paper of the afternoon, and yet, speaking from the standpoint of the state university, I should express the matter somewhat differently. It is hardly possible to place too much emphasis on the necessity of a graduate school seeking to accomplish important tasks. If graduate study is devoted

to trivialities, it becomes worthless and contemptible. Yet is it not quite as possible that too much stress may be given to the importance of the results to be reached by research before the work is undertaken, as that research may be too lightly entered upon? Research without criticism at every step, both in processes and results, is certainly futile, but not less futile is the criticism which makes the critic afraid to move for fear he may go wrong. The graduate student is exposed to other dangers perhaps quite as great as that of wasting time on trivialities and minutiae of investigation. The field of accomplished knowledge is so great, so pleasant, and so homelike in comparison to the rough and unknown country beyond that the student is always tempted to remain in it. He may become contented in the knowledge of the known; may find his happiness in "the best that has been known and said in the world," and forget the greater world outside of that which has been known and said, which still "lieth in darkness"; some part of which, large or small, he ought to gain for the light.

The temper of research, of discovery, is quite different from the spirit which rests in the appreciation of what has been already done. I was interested recently in reading Dr. Crother's admirable essay—"On the Honorable Points of Ignorance," in which the writer shows how the advance of our knowledge of the world has cramped and limited the free spirit of the explorer and has rendered exploration and discovery, in the old sense, almost impossible. But in the world of knowledge there exist no such limitations to the spirit of discovery. One can still make

journeys into the unknown, sure of finding something, and with good hope of finding something great. Such expeditions are not made at random. The great masters of research have a certain sense of the directions in which discoveries are most likely to be made. It is this sense which makes them great teachers of graduates. Yet if one waits until he is sure of finding a great prize at the other end of his journey into the unknown, it is very possible that he will not enter upon the journey. There must be a willingness to venture time and labor and to risk failure for the sake of discovery, and he who attempts to insure all of his risks before starting out will very likely stay at home. The discoverer in the field of research must keep some of that boyish spirit which is willing to risk and to do a great deal "for fun"; or, if you prefer a more dignified example, he must feel with Darwin that research is "much better sport than writing," or indeed anything else. And for these voyages of discovery there must be men of all grades — those who lead the expeditions; those who serve as guides; and those who merely serve as sailors or as laborers; each according to his own capacity. It is the main duty of the graduate school to inspire in all these grades of men this temper of discovery and to train it so that those who attempt these expeditions into the unknown shall reach results not necessarily of prime importance to the world, but results which will justify themselves according to the capacity of the explorer. The state university, feeling to the full the necessity for research and its value to the state, cannot do other than attempt to imbue its graduate students with

this spirit; sometimes restless, often over-eager; yet which is, after all, the mainspring of discovery and of the advancement of learning.

The question is often asked — “Will the state support research and graduate study?” I do not hesitate for a moment in answering “Yes.” Certainly our experience in Wisconsin has given us confidence in this belief. I have often heard the late President Adams say that it was far easier to secure appropriations from the state for research and for advanced work than for almost anything else, and later experience has been exactly similar to his. It is a comparatively easy task to secure money for the strong and well known departments of the university. When any department of a state university is so strong as to advance the reputation of the state, the support of such a department is secure. While the advance of graduate work in state universities cannot be urged forward too rapidly, it is peculiarly true in this direction that the counsel of timidity is the counsel of weakness and that a state which is conscious and proud of its own strength is far more ready to give cordial support to a strong and vigorous forward movement in education than to yield adequate maintenance to a policy of hesitation and reluctance to advance.

I believe, then, that the state universities have a great work to do in graduate research — a work which is peculiarly their own and which, in certain aspects, is different from the work which falls to our sister institutions endowed by private benevolence. The two classes of institutions, however, agree fundamentally in that the success of any graduate depart-

ment depends pre-eminently upon the teacher. The problem in the state university, as elsewhere, is not in the finding of buildings, of apparatus, or of endowments, but in the finding of men who are able to utilize these material conditions of graduate study. Any teacher in a state university, who combines the power of leadership with capacity for guiding his students into fruitful research can build up a strong graduate department. Perhaps his success will depend somewhat more upon himself in a state university than elsewhere. In whatever department he may labor, he may be sure of sympathetic encouragement from his colleagues, yet there is no such tradition in the state university in favor of certain departments or certain lines of study as will aid a comparatively weak man to secure success by means of external conditions. He must stand in his own strength, but if he is able fully and wisely to utilize the resources which the state will place at his command; if he is a clear-headed guide of young men, capable of inspiring in his students devotion to research and of indicating to them the directions in which their labors will be rewarded by success, he will find no difficulty in developing graduate study. And not only so, but he will have the still higher satisfaction of seeing that through his labors he is aiding to spread through a great commonwealth the temper of research, or at least that appreciation of the value of research on whose existence the future prosperity and happiness of the community must in large measure depend.

DEAN ALBION W. SMALL, University of Chicago:

It would certainly be profitable to make Professor West's inspiring paper the text for our discussion. Since we have had no opportunity to consider the contents of the paper, it would hardly be doing justice to it if we should attempt to extemporize argument upon the points which he has raised. I am disposed to take issue with him, not so much on what seems to me to be probably his final thought, but upon certain accidents in the degree of emphasis which he places upon details. For example, I should be glad to discuss the other side of the question of publishing theses. That a vast amount of rubbish is unloaded upon a defenceless world in doctor's theses is notorious. It is not worth while to say anything in mitigation of the fact. At the same time it beggars imagination to think how much worse rubbish might be passed off upon lenient faculties if publication were not required. Not merely the magnates of the beef trust, but members of university faculties have the failings incident to human nature. We all need publicity to keep us decent. The publication of theses is a necessary precaution as a defence against greater evil.

Again, I think there is something to be said even in favor of "swollen diction." When we are threshing out scientific problems it is desirable to avoid so far as possible every temptation in the direction of premature appeal to the general public. It demoralizes scientific processes if they are conducted in a way which appeals to laymen. When I read a monograph by one of my colleagues, and am not sure that I know what he is talking about, I do not feel that

I have a grievance against him, but that he is quite within his own rights in employing terms in a technical way that I do not understand. I want the privilege for myself of using a jargon, when I am dealing with open questions in my own preserve, that will keep amateurs from butting in. On the same principle that doctors still write their prescriptions in Latin, partly to prevent people from dosing themselves with drugs whose uses they do not understand, I think a great deal is to be said for a technical idiom that will keep the multitude from rushing in where they are not prepared to tread.

I feel grateful to Professor West for the standard he has set up for graduate students. I hope the time will come when professors in graduate schools will have none but students of the quality he has described. When that time comes I do not see how it will be any longer possible for the preachers to make those professors believe there would be any gain in going to heaven. Meanwhile, with such an ideal of the desirable quality of graduate students we must adopt a practical, working standard, and approximate it as nearly as possible.

I suspect that I am counted on to take issue with the representatives of State institutions in this discussion. Although I have always worked in private institutions, I am a congenital democrat, and it requires no stretch of my imagination to foresee that public institutions must ultimately bulk larger in democratic education than those privately sustained. All-Of-Us have larger resources than Some-of-Us. On the other hand, for obvious reasons it will for a long time be easier for private institutions to main-

tain certain standards of quality which public institutions cannot enforce. In the matter of graduate work the advantages are by no means all on one side. There are certain qualitative conditions however in which private institutions may have an advantage which state institutions for an indefinite future will fail to offset.

My conception of the contribution which I ought to make to the discussion leads me to follow a somewhat different line of inquiry from that of the previous speakers. I heartily agree with President MacLean that it would be impertinent to assume that the importance of graduate work is sufficient to justify any weakening of collegiate work. We certainly could better do without any new doctors of philosophy for a generation than we could afford to cripple undergraduate instruction. I speak of graduate work not as a rival of other stages in our educational programme, but as one stage which deserves to be valued on its own merits.

I would also preface what I have to say by the necessary qualification that no university in the United States can justly claim to be adequately equipped for graduate work in all departments. Indeed, I should be rather surprised to discover a single department in any university whose professors would admit that their equipment was adequate. Allowing for the demands of every investigator for further equipment, it remains true that no university is furnished with research facilities at all points. Some of them are strong in certain departments and weak in others, and in the strongest

the proper equipment for graduate work is at best an ideal far in advance of realization.

With these qualifications I have tried to codify the opinions of representatives of the twenty-six graduate departments in the University of Chicago as to the essential conditions for respectable graduate work. From the replies which I received to my questions I have reduced the items to the following schedule:

First, the question of proper conditions would be pretty well settled in advance if we could agree upon the definition of the distinction between undergraduate work and graduate work. I will not undertake to justify my own definition, but I will venture to assume that we are substantially agreed on something like this: Considering merely the intellectual factor of the two stages of education, *undergraduate instruction puts the emphasis on imparting accepted knowledge; graduate instruction puts the emphasis on training for investigation*. Of course it is possible to argue, and one of my colleagues does argue very strenuously, that no line can properly be drawn between training for investigation and any other rational form of instruction; that proper instruction from the kindergarten up is training for investigation. There is an element of truth in the contention, but practically there is a period, between the time of juvenile curiosity and the stage of scientific interest, during which the research element in the mental processes of pupils is an inconsiderable quantity, or at least a minor factor. When we shall begin to provide for the needs of the strictly scientific interest, is a ques-

tain certain standards of quality which public institutions cannot enforce. In the matter of graduate work the advantages are by no means all on one side. There are certain qualitative conditions however in which private institutions may have an advantage which state institutions for an indefinite future will fail to offset.

My conception of the contribution which I ought to make to the discussion leads me to follow a somewhat different line of inquiry from that of the previous speakers. I heartily agree with President MacLean that it would be impertinent to assume that the importance of graduate work is sufficient to justify any weakening of collegiate work. We certainly could better do without any new doctors of philosophy for a generation than we could afford to cripple undergraduate instruction. I speak of graduate work not as a rival of other stages in our educational programme, but as one stage which deserves to be valued on its own merits.

I would also preface what I have to say by the necessary qualification that no university in the United States can justly claim to be adequately equipped for graduate work in all departments. Indeed, I should be rather surprised to discover a single department in any university whose professors would admit that their equipment was adequate. Allowing for the demands of every investigator for further equipment, it remains true that no university is furnished with research facilities at all points. Some of them are strong in certain departments and weak in others, and in the strongest

the proper equipment for graduate work is at best an ideal far in advance of realization.

With these qualifications I have tried to codify the opinions of representatives of the twenty-six graduate departments in the University of Chicago as to the essential conditions for respectable graduate work. From the replies which I received to my questions I have reduced the items to the following schedule:

First, the question of proper conditions would be pretty well settled in advance if we could agree upon the definition of the distinction between undergraduate work and graduate work. I will not undertake to justify my own definition, but I will venture to assume that we are substantially agreed on something like this: Considering merely the intellectual factor of the two stages of education, *undergraduate instruction puts the emphasis on imparting accepted knowledge; graduate instruction puts the emphasis on training for investigation*. Of course it is possible to argue, and one of my colleagues does argue very strenuously, that no line can properly be drawn between training for investigation and any other rational form of instruction; that proper instruction from the kindergarten up is training for investigation. There is an element of truth in the contention, but practically there is a period, between the time of juvenile curiosity and the stage of scientific interest, during which the research element in the mental processes of pupils is an inconsiderable quantity, or at least a minor factor. When we shall begin to provide for the needs of the strictly scientific interest, is a ques-

tion by itself. Whether earlier or not, provision for this interest must distinctly mark the graduate stage of instruction.

Second, in accordance with this fundamental position it hardly needs argument that the indispensable condition of good graduate work is what I may call the "graduate atmosphere."

The meaning of the phrase may be brought out best by an illustration or two of what is not the graduate atmosphere. In the first college class that I instructed there were three men older than myself. I was fresh from university study in Germany and verdant with ideals of advanced work. I found slavery to text books the regime. Early in my first course I had occasion to point out an error in one of the reference books in history. After the class, one of these oldest men came to me with an air of mental disturbance, and asked if he was correct in understanding me to take issue with the author of the book. I informed him that he was, and showed him how he could easily prove that the author was wrong. He replied, "this is a new experience for me. I had always supposed that if a man knew enough to write a book, he knew all about it." I gradually realized that I might well consider my work a success if I succeeded in showing the average member of that class that many men write books not because they know enough to do so but because they do not know enough not to. I would not imply that the case is a fair index of the average undergraduate state of mind today. My point simply is that the illustration represents an extreme situation with which the graduate atmosphere is in contrast. An-

other symptom may be used in the same way. In dealing with new graduate students, when they are registering for university courses, one constantly hears the phrase, "I have had" Physiology, or Chemistry, or English, as the case may be. That is, in the mind of those students there are certain divisions of knowledge which they have disposed of once for all, and their outlook contains no provision for unexplored territory beyond the present range of their vision.

A similar symptom was discovered in my office during the past fortnight. An applicant for a graduate fellowship in the Department of English presented a dissertation said to have been accepted already by another institution for the Master's degree. With the application was the request that the dissertation might not be too harshly judged, because the writer "had access to only one critical work in preparing it." There simply is a vacuum, instead of a graduate atmosphere, if it is possible for a student to suppose that proper preparation for research work can go forward under the circumstances indicated in the last instance. On the contrary, the graduate atmosphere is tense with stalwart conviction that the half has not been told in the department of science to which each student is devoted, and that the right sort of work will bring facts and relations to light which will put a greatly different look upon what now passes for knowledge. I hesitate to use phrases which are easily misunderstood and eagerly misrepresented. The graduate atmosphere is not a favorable medium for the nurture of the mentally or morally incompetent. It is dominated by what we

may variously name "the critical spirit," "intellectual scepticism," "the scientific spirit," or any other phrase which means that merely traditional authorities have lost their control, and that the mind is free by means of the truth to seek for larger liberty in discovering truth.

Third, these fundamental conditions being taken for granted, the remaining items are relatively matters of detail. The specifications most emphasized by all my colleagues are as follows:

1. Adequate library facilities, including the scientific journals in each of the departments. Without the latter provision students may waste the larger part of their time doing work which would be needless if they were properly informed about the results of workers elsewhere in their own field. I quote from the report of the English Department; "Ten thousand volumes may be regarded as a minimum library for graduate purposes in English alone, although in some cases special collections, each of a few hundred volumes, may permit a few good dissertations to be produced. Quite as important for English as a large English library are large collections of books in collateral fields, especially (1) general and Germanic linguistics; (2) the literatures in the Germanic languages, as Old and Middle High German, Old Norse, modern German; (3) The Romance literature, especially Old French, modern French, Italian and Spanish; (4) history, especially culture history; (5) the classical literatures, including mediæval Latin and the literature of the humanists."

2. Collections and apparatus sufficient not merely for illustrating known scientific principles,

but for furnishing the material or the conditions for scientific discovery.

3. Instructors whose time is so freed from undergraduate instruction, administrative duties, or other demands that their strength can be devoted to original research.

4. Regular production of results in each of the fields of research. Actual experience in the enlargement of knowledge and not mere theorizing about it is a necessary factor in adequate training for independent research.

5. A strong and numerous body of graduate students in each department. This body of neophytes is a condition only less essential than the presence of proper instructors. One mind stimulates another. One of my colleagues reports, "We have frequently seen graduate students who come to us after a year's so called graduate work at another institution, where there are only some three or four other graduate students, do here in six months, under the stimulus of association, more than they had done elsewhere in a year."

6. A high standard of preliminary preparation. This is the condition upon which Professor West has so forcibly insisted. Of course the details which must be regarded as essential in preparation are too complicated to be summarily specified.

7. Equalization of allied or subsidiary departments. That is, graduate work cannot be conducted under favorable conditions in a language if the cognate languages are not relatively strong. Work in a physical science would be at a disadvantage if the

tributary sciences were not so equipped as to furnish the necessary reinforcements in the working out of problems.

8. A favorable environment. That is, facilities not academic in the strict sense, but affording larger opportunities for observation and experience in directions cognate to the department concerned, such for instance, as hospitals, clinics, courts, libraries, music, art galleries, and, especially for students of literature, even the theatre.

9. Provision in certain departments for investigation in the field (Geology, Botany, etc.); in other countries (languages, history, etc.); in other institutions (special documents, collections of books, or scientific material, or special apparatus).

10. Utmost absence of arbitrary requirements or conditions in choice of work and in using time as the demands of one's special subject may dictate.

11. Publication facilities, enabling investigators to present their results to their peers and to obtain the benefits of criticism.

12. Provision of fellowships ample enough to defray the living expenses of picked students. Otherwise the most capable may be forced to earn a living directly instead of devoting themselves to investigation and thus earning something better than a living.

After what I have said it goes without saying that education for research, with such conditions as the foregoing as requisites, is certainly one of the things that cannot be monopolized. Any institution would stand self-condemned if it should imagine that it can gain or maintain a monopoly of this type of work. Excellence in scientific research cannot be

confined to a single locality. There cannot be too many additions to the ranks of skilled investigators, provided they are adequately furnished with the equipment necessary for the use of their skill. I hope I shall not be misunderstood, however, when I call attention to the serious misfortune of permitting students to imagine that they are doing graduate work when they are merely prolonging the period of undergraduate absorption. Institutions that cannot furnish facilities for carrying inquiries to the point of discovery, and that cannot assemble a considerable working force both of instructors and of students who are constantly progressing toward discovery, ought to reflect long before they encourage students to remain after taking the Bachelor's degree. In so doing they are likely to keep students temporarily and perhaps permanently in a state of suspended mental animation, when they might develop productive efficiency in a favorable graduate atmosphere.

Third Session, Saturday Morning.

The Association was called to order by President Bliss at 9:30 o'clock A. M. Principal Gilbert B. Morrison, of the William McKinley High School of St. Louis, then presented the following paper:

SOCIAL ETHICS IN HIGH SCHOOL LIFE.

**PRINCIPAL GILBERT B. MORRISON, William McKinley
High School, St. Louis.**

A full and comprehensive treatment of a subject like the one before us is a difficult undertaking—difficult because like other questions dealing with human relations, it involves so many incommensurable elements. The elements of custom, of feeling, of selfishness, and of prejudice, which enter so conspicuously, have no common measure or standard to which they can be bound. Any institution, organization, belief or sentiment which is the result of feeling and not the result of reason can not be reached by means of reason or argument. In our class room work with our students and our prescribed subjects before us our task is comparatively easy and our duty plain. It is here only a question of the best means to a well known end. If the services of the schoolmaster had a function as clear and definite as is that of other employes in the various

walks of life, his burdens would be commensurable with theirs. If we opened our schoolhouse doors in the morning and entered, possessed with mature minds, ripe scholarship and cheerful faces, with clear plans of presentation, and with a sympathetic spirit; if we met our pupils with a friendly, energetic determination to assist them in learning the subjects which we have engaged to teach, and at the close of the school day closed our doors with a cheerful goodnight, with a real, genuine feeling of interest for the well-being and success of our pupils, we would certainly be fulfilling the letter of our contract. Would we be fulfilling its spirit? Would we be giving to the pupils, to the parents, and to the school board the full measure of our usefulness? Without class organizations, athletics, picnics, fraternities, sororities, parties, orchestras, carol clubs, glee clubs, violin clubs, dramatic clubs, receptions and pink teas—without school societies of any description whatsoever—could we still maintain a good school? With our duties as clearly defined as are those of the employes of the Post Office, could the public school fulfill its function of state education as efficiently as does the Post Office fulfill its function in the distribution of the mails? If social matters were ruled entirely out of our schools and left to the home and the church would our schools be better or worse than they are at the present time?

This question I shall not undertake in this paper to answer. I am not yet ready to answer it when put in this unqualified form. It is enough here to say that many intelligent teachers of wide experi-

ence are beginning to believe that our schools would gain by this limitation of function.

One of my associates — a lady teacher of rare tact and ability, who has for years voluntarily entered with spirit into the social and literary affairs of the pupils because she believed they were beneficial, said to me recently that she had slowly and reluctantly reached the conclusion that student organizations of any description whatever are hurtful to the pupils and to the school.

These doubts and apprehensions have probably in some form and in some degree come to all of us. But we have to guard ourselves against these doubts lest we be influenced by the care and responsibility in dealing with the social life rather than by the real content and value of it. The existence of a school organization of an evil kind may be taken as an indication that all organizations are evil, or it may be taken as an indication that organizations of a good kind are a necessity. My own experience thus far leads me to the latter view, though at times I find myself wavering and strongly inclined toward the former.

As I have said on a former occasion the tendency to organize seems to be inherent and spontaneous and manifests itself whenever and wherever large numbers of people are thrown together. This trait manifests itself at all ages from early childhood to old age. It is a natural impulse for the massing of force and power and has in itself no ethical quality whatever. It is even manifested by the lower animals who collect and roam together for the purposes of offense and defense. It also contains the social

instinct in which an individual finds pleasure in the company of his own kind. This organizing tendency may, I think, be put down as a fundamental fact—a fact with which we have to reckon whether the task be congenial or uncongenial.

Considered generally, organizations must be recognized simply as natural phenomena. But when we consider them specifically, each on its merits as to its aims, purposes, and ultimate effects on its members and on others, the question at once takes on an ethical quality, and it must be classed as good or bad as it makes for human well being or for human ill being—as it contributes to the totality of order, harmony, and happiness, or to the totality of disorder, discord and unhappiness. The responsibility then of meeting and guiding the social tendency of our children seems to be ours by virtue of our relation as parents, and of our office as teachers.

In accepting this responsibility we should first ascertain whether there is common ground on which all may stand as a basis for correct opinion. Are there any basic principles of right action which should govern the conduct of teachers outside the class room? Is there any postulate by which the social relations of students and teachers may be measured?

It seems that the common law governing the public schools furnishes us the clue to such a postulate if not the postulate itself in the simple and well known provision that the teacher shall be *in loco parentis*—that our relations with the pupil while under our care shall be that of a wise, kind, sympathetic and judicious parent.

This provision, I think we shall all agree, is founded also upon nature — upon the necessary relation existing between the mind that imparts and the mind that receives. It is well understood by all teachers that however well we may know our subject and however ably we may expose it, our teaching will be fruitless unless we hold ourselves constantly within the horizon of the pupil's sympathies, desires, capacities and interests.

Accepting then the postulate that the teacher is *in loco parentis*, it only remains to determine the true social, ethical relations which should exist between the parent and his child. In finding this we shall find our true relation as teachers.

In transferring the analysis of this relation from the school to the family we are not lessening its difficulty for we shall encounter the same differences of opinion and custom in the conduct of the home that we find in the conduct of the school, but while by so doing we may not alter the nature of the problem, we shall at least bring it nearer to us; we shall see it in a clearer light, and a truer perspective. By taking it home, we shall view it in an atmosphere in which there will be less danger of confusing the real components.

Now, what are these components? They may be considered under two general heads: The rights and duties of the parent, and the rights and duties of the child. It will be understood that these rights and duties which we are here considering are only those relating to the child's mental, moral and social welfare — only those with which the teacher has to deal.

We are not considering the matter of food, clothing and shelter.

In a well regulated family, the child makes known his wishes and receives from the parent a thoughtful hearing. His requests for innocent social pleasure are granted whenever they do not encroach upon the rights of others or interfere with his own daily duties. He is allowed pleasure as a recreation, but not as a consuming occupation. It is his *duty* to submit cheerfully to the decision of his parent as to limitations and propriety. The parent judges the proposed pleasure by its ultimate effects on the child's character and on its immediate influence on his associates, and not on the desirability of the pleasure from an adult standpoint — of the pleasure *per se*. The wish of the child justifies the pleasure unless some evil effect can be foreseen.

The wise and careful parent guards against exhibitions of selfishness and clannishness between the different members of the family. The bright and naturally forward children are taught to assist the weaker ones, and to make them forget the difference between them. In a large family certain ones would not be allowed to withdraw themselves from association with the others, and to plan in secret, pleasures from which the other children were barred; for acts of selfishness and clannishness are not tolerated in a well regulated family.

Let us suppose for example in a certain neighborhood there are several large families. These children would naturally associate together, and would likely form societies and clubs for purposes of mutual enjoyment. They would have their picnics, their

afternoon and evening parties and their teas. They might, with the approval of their parents, even have dances. They might form societies for literary or philanthropic purposes; and in their churches, for Christian endeavor.

The cohesive element in all these gatherings is the social impulse — the desire of the young people to get together. At their age, it is probably a natural segregation whose unconscious impulse is the mating instinct. All this is innocent, natural and even necessary to the normal development of the children.

Now let us further suppose that after being allowed all these diversions and natural liberties, say four boys of a single one of these families, who were especially congenial to one another, and who fancied that they were a little smarter or better looking than their other brothers and sisters, should have a secret meeting in the barn and draw up resolutions and a charter declaring that they would not associate with the other children; and that they further advertise their exclusiveness by adopting a mysterious looking pin and by wearing it conspicuously and ostentatiously. Further suppose that at one of their meetings they resolved to petition the father that they be allowed a special table in the conservatory end of the dining room, and that their napkins and other table ware be decorated with their monogram. Imagine that in leaving the dining room after each meal they stopped at the table of family "barbarians" and sent forth a cabalistic yell. Suppose still further that finding their numbers too small for the highest fraternal prestige, they visited the other families of the neighborhood and called aside four congenial

spirits from each, forming chapters Jones, Smith, Brown, Jenkins, Williams, Adams, Perkins, Baker, Wilson, and Thompson, and that a grand conclave was held in one of the barns, and finding it too small, and lacking in elegance, resolved to importune their "governors" for a "smoke" house of their own, going for this purpose to each separate father, bringing to bear upon him the united influence of the self styled "best boys" of the "best families," uniting their voices in a terrific yell to convince him of their power, their determination and their solidarity.

Try to imagine the father with the barbaric remnant of his divided family meeting these juvenile patricians, and asking them what it all meant, whether it was not selfish and hurtful to their morals, and very distasteful to the other members of the family. Try also to put yourself in the father's places when he heard the assuring response that the organization was for the good of the family, and that he would readily concede it if he could only know the inside works, but the fraternity being sworn to secrecy, he could only take it on faith, and that concerning the "best boys" this faith should come easy to him. .

Now try further to imagine what a father who had allowed things to proceed thus far would do under precisely such circumstances. It may be supposed that different fathers would do different things, but it is highly probable that if this supposed father was the least bit old-fashioned this conclave would be dissolved and that a called meeting of the "Smith Chapter" would immediately follow in the family barn—a strictly business meeting at which the father

would be master of ceremonies and would furnish all the numbers on the program. Following this would probably be a confiscation of the "Smith Chapter" coat-of-arms and a place made for its late members at the family table.

Now had these boys formed such an organization under other and opposite circumstances, our view of their case might be quite different. If they had been denied all home pleasure of a diverting and innocent character, if they had been kept down to hard lessons and hard work without relaxation and without sympathy, we could certainly find excuse for their seeking relief even in an objectional form, for one abnormal condition generally breeds another counteracting it. We can find some defense for a lot of boys who hold a card party in a hole in the straw stack if they had been taught that cards and Satan were synonymous terms. We could find strong grounds for the defense of a company of boys and girls having a dance in a hired hall, even in a questionable neighborhood, if that were the only place where such pleasures could be found—if all forms of dancing were proscribed as the acme of sin and frivolity. But happily, with few exceptions, such straight laced methods are no longer found in the home. Here the atmosphere is generally free, and natural, and unreasonable requirements are seldom imposed. It is for this reason that the family fraternity just pictured seems so ridiculous, improbable, and far fetched.

This leads us to the secret fraternity question as it exists in our schools and prepares the way for a consideration of the question from a new point of

view—a point of view looking toward their cause, instead of exclusively toward their effects.

As to their effects, perhaps enough has already been said in previous meetings, and in previous papers. I have covered that ground as well as I could in my paper to the N. E. A. It is unnecessary to go over the same ground again except in brief review.

Since that paper was read, several others have appeared, notably those of Superintendent Cooley, Chairman Smith of the committee appointed by President Harper, and of Mr. Peetee, of Cleveland. In all there is substantial agreement as to the effect of these fraternities. The consensus of the best thought, based on the broadest experience, condemns them. They are condemned because they are unnecessary; because they are factional; because they form premature and unnatural friendships; because they are selfish; because they are snobbish; because they dissipate energy and proper ambition; because they set wrong standards of excellence; because they are narrow; because rewards are not based on merit, but on fraternity vows; because they inculcate a feeling of self-sufficiency in the members; because they lessen the frankness and cordiality toward teachers; because they are hidden, and inculcate dark lantern methods; because they foster a feeling of self importance; because high school boys are too young for club life; because they foster the tobacco habit; because they are expensive and foster habits of extravagance; because of the changing membership from year to year they are liable to bring discredit and disgrace to the school; and because they weaken the efficiency

of, and bring politics into the legitimate organizations of the school and because they detract interest from study.

But these fraternities do not exist as an original fact. They must certainly have a cause for their being. They have risen out of certain conditions. If they are wrong, then we must find something wrong in the conditions—some mistake somewhere.

I have already noted the fundamental fact of a tendency to organize and a tendency to secure pleasure in social coherence. We shall, I think, find one cause of the fraternity if we go back far enough in the college atmosphere existing at the time the first fraternity was formed. When this was I shall not even venture a guess, but whenever or wherever this anomalous birth took place I fancy that there existed between the students and the faculty an air of distance, that the professors were excessively dignified, and dispensed a ponderous curriculum through the medium of high sounding lectures to which the students were required to listen, to catch what they could and to pass an examination upon it; that requirements and memory tasks were imposed upon them such as are never imposed upon human beings outside of college walls; that very little attention was given to the social needs of the students; that a stilted austerity prevailed among the professors which forced a student reaction to get even; that "anything to beat the profs" became a justified rule of action for self preservation; and that one of the means hit upon was the secret fraternity.

The justification which otherwise honest students find in cheating in examinations probably had its ori-

gin in similar conditions. These conditions may have improved but the fraternity still persists, partly from the force of custom and precedent, and partly from other causes. One of these causes lies in that form of selfishness which has always shown itself in the form of some species of caste; the desire to be set apart from the common herd—a desire which Nature originally intended as a spur to real worthiness and true merit, but perverted, appears in a desire for distinction of any sort, worthy or unworthy, merited or unmerited.

Since the earliest recorded times, this tendency toward caste has manifested itself. The patrician in some form or other has appeared in every civilization to lord it over the plebeian. The tendency of the best civilizing agencies is to outgrow this trait. The evolution of society is in the direction of altruism; but the secret fraternity is an example of a sort of reversion of type. It is like sundry other lapses and moral delinquencies which the boy is permitted to descend to when he enters college, but which he is not permitted to carry away from college into the business world.

Whether secret fraternities, as they exist today in the colleges and universities, have any use or justification I shall not attempt at this time to answer. I have been obliged to refer to them in this connection only in seeking their origin in the high school, where they are being formed by our boys and girls in childish imitation of what they see and hear going on in the colleges.

These fraternities, by means of their secret, dark lantern methods, and because of fear or indifference

on the part of principals, have in many cities so persistently multiplied as to become a positive menace to the high schools. As before stated, the consensus of competent opinion condemns them. I shall therefore pass to the problem of handling them—of checking their growth—of abolishing them. To this end I must recapitulate their causal elements that we may view them in a compact form. They exist (1) for self protection against unreasonable requirements of the faculty, (2) for social pleasure, (3) for the gratification of the organizing tendency, (4) for exclusive exaltation—caste.

The first of these causes can be removed only by a regeneration of the atmosphere of the school itself. School requirements must be made reasonable, natural and free from austere and stilted pretense. The best schools of today have outgrown this condition.

The second cause is a natural and legitimate motive and is met and answered through the working management of the school as a whole. Pupils are allowed to have social diversion in the school building. They have their spreads, their socials, their receptions, and their dances, all in the school building, or other suitable place where the teachers are invited—where they renew their youth, and where they enter into the joys and the sympathies of their pupils. They need this diversion fully as much as do the pupils. It keeps open the life currents which make the old and the young mutually helpful to each other. It makes better teachers of them and better men and women. It gives the pupils what they crave and what they need in a secure and sheltered atmosphere.

The third cause, the gratification of the organizing tendency, is also a legitimate motive. This is supplied in providing for literary and science societies, musical clubs, etc. These societies should be, and if rightly managed, are adequate to satisfy the organizing tendency.

In the fourth element, that of secret exclusiveness and caste, we find a motive which, although natural, must not be humored or encouraged—a motive ethically illegitimate, selfish and downward in its influence on character. All that civilization has reached which receives universal assent contains the elements of democracy and altruism. The secret fraternity is wholly subversive of both. Whether we look at it from the standpoint of Christianity, philosophy, or sociology, it is out of harmony with those principles and laws of being which in the last analysis are universally accepted as fundamental.

The application of these principles becomes especially mandatory in the public schools which are essentially democratic. In a private institution, managed to suit the peculiar notions of its owners, a student who does not like the caste system which he may find there can leave it and be done with it; but in a school supported by the general tax the student can not escape its burdens by leaving it. He still must contribute to its support. It is plain to see that in a public high school honey-combed with exclusive sets under the name of fraternities, a father may be taxed for the ostracization of his own boy. It is not an uncommon thing to hear remarked that to be anybody in this or that school one must first secure membership in some fraternity. An essen-

tially democratic institution can not be a breeding place for social differentiation. The two ideas are incompatible, and by their nature antagonistic. It necessarily follows that the schools must shake off this abnormal incubus or they are doomed. Let this country become fully aware that our high schools are caste breeders or caste harborers, and tax payers will cease to provide for their support.

It seems to me then that it becomes our duty as school men, first to see that no legitimate cause or excuse for the existence of these fraternities remains in our schools—to see that their legitimate elements be supplied to the pupils through the school at large, and no less to see that these undemocratic, disintegrating forms of the organizing tendency be courageously and strenuously resisted.

The subject was further discussed by Dr. E. H. Lewis, of Lewis Institute, Chicago.

DR. LEWIS:

I have listened to the discussion this morning with the greatest interest, not only because the subject is important, but because the gentleman who has spoken has a peculiar right to speak on the subject. We all know him as a man of the fullest experience, the most genuine sympathy with student life, and the most genuine moderation. Certainly the facts which have been presented to the disadvantage of high school fraternities are very grave.

I admit fully the trying nature of these facts. There are times when even in Lewis Institute, which is one of the most favorable of experiment stations, all fraternities present themselves to me under the

There will doubtless be more rather than fewer fraternities and sororities in the Institute. The presence of so many acts as a constant suggestion to the forming of new ones. It would not be surprising if in time the whole school, with the exception of a few students who are born grinds, a few others whose parents object, and a very few who do not like to flock with anyone, should be organized into these small groups. But if we may judge by the past, such a consummation will not interfere with what is called school spirit. For it is found that other and larger groupings are as normal to the student body as are the smaller. There are half a dozen literary societies. There is the chorus, of 300 voices. Above all, there is the so-called "Allen C. Lewis Society," which meets once a month, and which consists of the entire day-school. It is quite as truly alive as any of the smaller organizations, as becomes evident when election day comes round. Of course the fraternities struggle among themselves for control of that election. But there is no one ring, and apparently no corruption. At the last election many of the fraternities joined together to support an anti-fraternity ticket, and the election was so close that for several hours the anti-frat ticket was supposed to be elected. The issue was not really an anti-frat issue. A certain very popular student who had never joined any fraternity was the real bone of contention.

Of course in this whole matter of secondary fraternities, we are all aiming at the same end. We all wish to advance the cause of democracy in the hearts of the American people. We wish, as Bishop Wilson said of culture, "to make intelligent beings yet more

ing their medicine the frats only think they are secret, whereas after taking they really are secret. So to change the figure of speech and construct an Irish bull, the Institute decided to take the bull by the horns. (To change it once more) at the first rumor of the birth of a fraternity, the parents were informed that the alma mater would take an interest in it providing they chose some member of the faculty to act as sponsor for it.

In this way our system of sponsors arose. To-day we have more than twenty secret societies, and only two or three are of college rank. Every one of them has a sponsor, and every one has taken pride in seeing to it that its sponsor should not be put to shame before his colleagues in the faculty. It is sometimes a bore for a member of the faculty to enter into the affairs and the spirit of the fraternity. But after all we have gradually worked into the spirit of Juvenal's motto, "Homo sum. Nihil humanum mihi alienum puto." If Principal Coy will not scan the Latin too closely, I will work that over into, Pœdagogus sum. Nihil pœdagogicum, nihil adulescentiae mihi alienum puto. In other words, if there must be frats, we want to be in them. We don't wish to intrude — we don't wish to dampen fun, nor to make student customs, but still we are primarily teachers, and our first subject of research is human nature. Any one of the publishers who are with us to-day, in their gentle but watchful fashion, will tell you that the safest place to have a troublesome rival text-book is on their own list. Well, that is our principle exactly.

There will doubtless be more rather than fewer fraternities and sororities in the Institute. The presence of so many acts as a constant suggestion to the forming of new ones. It would not be surprising if in time the whole school, with the exception of a few students who are born grinds, a few others whose parents object, and a very few who do not like to flock with anyone, should be organized into these small groups. But if we may judge by the past, such a consummation will not interfere with what is called school spirit. For it is found that other and larger groupings are as normal to the student body as are the smaller. There are half a dozen literary societies. There is the chorus, of 300 voices. Above all, there is the so-called "Allen C. Lewis Society," which meets once a month, and which consists of the entire day-school. It is quite as truly alive as any of the smaller organizations, as becomes evident when election day comes round. Of course the fraternities struggle among themselves for control of that election. But there is no one ring, and apparently no corruption. At the last election many of the fraternities joined together to support an anti-fraternity ticket, and the election was so close that for several hours the anti-frat ticket was supposed to be elected. The issue was not really an anti-frat issue. A certain very popular student who had never joined any fraternity was the real bone of contention.

Of course in this whole matter of secondary fraternities, we are all aiming at the same end. We all wish to advance the cause of democracy in the hearts of the American people. We wish, as Bishop Wilson said of culture, "to make intelligent beings yet more

intelligent." The real question is, Do fraternities make for or against the social self?

I cannot bring myself to modify the issue so as to read *secondary school fraternities*. I am convinced that if there is a normal period for secret societies, it is the high school period rather than the college period. It is from sixteen to nineteen rather than from nineteen to twenty-one. The earlier period is the period when sentimental attachments and impossible loyalties are strongest, when they do the least harm and the most good. Solemn nonsense is a boyish thing. Vows of eternal friendship are sometimes misplaced, and the earlier the mistake is made and discovered, the better.

But does the fraternity spirit make against democracy? The word democracy is not easily defined; the whole world is trying to define it; trying to reconcile the human need for personal liberty with the new conceptions of the public self, without which there can be no personal liberty. Do the secrecy and the exclusiveness of small groups among the young militate against the welfare of the public self?

I cannot think that secrecy in such a group militates against anything. Publicity is not the same thing as public spirit. The family is the original secret society, and so long as it is a good family, the more secret it is, the better. There is too much in the newspapers about many families. If Americans would do their best to keep their names out of the newspapers, the millenium of democracy would come along faster. The hidden life — that is the only life which the religious and the ethical instinct both

approve, and the hidden life is a thing comparatively rare nowadays.

In the matter of exclusiveness the case is doubtless more serious. On the face of it, it looks as if it were fatally serious. It looks as if these cliques make for nothing but snobbishness and envy and quarreling. And yet there are great social instincts for good underlying even snobbishness, envy, quarreling. Snobbishness is merely a pathetic instinctive worship of distinction, breeding. No man can be a good democrat who is not also, in one corner of his being, a good aristocrat. Vulgarity is not democracy. Envy is merely a distortion of emulation, and a fine emulation is the spring of most of our really social acts. Quarreling is beastly, and yet we cannot do without the fighting instinct. I see no reason why fraternities in the high school should not make for breeding and for fine emulation rather than for the base imitation of these qualities.

It is urged that fraternity life among the young boys springs out of a need for companionship that should be satisfied at home. But surely this implies an overstatement of the case. Surely an adolescent needs something additional to his home-life, something that shall act as a social transition from the home to the world, just as the class room acts as an intellectual transition from the home to the world. The class room does not meet the social need. It might do more to meet it than it does. It might be a place where, in the humarer subjects at least, he could express himself, his personality. Consider the free play of mind that marked the academe of Socrates, that marks the relations of an Oxford tutor

and his men, and ask whether free play of mind is a thing that marks the class room of the American secondary school or even of the American graduate school. It does in some cases. It does, for example, when my friend Scott gets his best men around a table in his seminar room. But in general free play of mind is wanting in our class rooms. We have dropped the military idea in discipline, but we still think that discipline of mind is best achieved through set questions and set answers on matters of the narrowest academic significance.

Now free play of mind is exactly what does mark fraternity life, even in the youngest students. There is no such mental discipline as that which boys give each other in applying their own powers of mind in the criticism of each other's powers of mind. The fraternity is the true laboratory of human nature, the retort and test-tube in which boy learns boy. How much of life consists in learning to know men! Unless one learns that lesson, so that he learns, as Louis Stevenson used to say, "Where he must go warily and where he may lean his whole weight," he will go out from school a pedant, but no man.

You and I are old-fashioned enough to believe in the grave importance of friendship; the right friendship; the friendship that is not assumed in order to sell goods, but that is lived up to at the cost of losing goods, lived up to because our friend stands for truth, or civic need, or for the public self itself. I maintain that the fraternity grows out of the deepest instincts of man. We didn't have it fifty years ago. No, neither did we have the beef trust and the municipal voter's league. New occasions evolve new

expressions for noble instincts. The municipal voter's league is the secretest society in this town, and yet it makes the most for civic publicity. Gideon's band was secret and exclusive. The underground railroad was secret and exclusive. And out of high school fraternities there will grow the voter's leagues of the future.

You will pardon me if I seem to be waxing warm about glittering generalities. After all we are agreed on the general principles underlying the whole discussion. To sum up, however, it seems to me that as man cannot love God, whom he has not seen, before he has learned to love his brother whom he has seen, so a boy cannot love the public, which he has not seen — no, not even in the pages of yellow journalism — until he has learned to love a small group of boys whom otherwise he would be envying and fighting. I grant you that the first boys to join a fraternity are the poor students. But are they also the cheats, the sneaks, the liars of the school? Are they the stingy and covetous? Are they the blockheads who get 100 in mathematics or language and never use their mathematical or linguistic ability in the service of the community? No, they are not. They are the very boys who are at the bottom social, and therefore need to be got hold of by somebody and made instruments of the social self.

I do not believe in uncontrolled sodalities in the high schools, nor in uncontrolled anything in any school. But if fraternities are a good thing in an American private school, I cannot see why they are a bad thing in an American high school. A friend whose opinion carries weight says that the difference

between private and public school "makes all the difference in the world." But to me it somehow seems to make no difference at all.

PRINCIPAL ARMSTRONG, of the Englewood High School, being called for, said:

I do not believe I have thought of this question enough to make an extemporaneous speech. Mr. Morrison stated a very vital point when he said the settling of a question of this kind is largely a matter of feeling and so it is difficult to reach it through argument. It occurs to me that when letters of inquiry sent to large numbers of school men bring back the almost universal reply that secret societies are a detriment to the spirit of the public schools, it is an opinion of great importance. Fraternities and sororities originate usually among the brightest pupils of a school and doubtless have their origin in a common instinct of mankind for organization. It is only after some years have passed that their bad effects show. The organization leans more and more upon the good record of its founders and gives less and less thought to the choice of prospective members. The result is that in a few years the society is made up of a different element.

I recently heard a pupil defending his fraternity by telling what pains were taken to secure only the boys of the best principles to join his society. Within three months his father came to see what he could do to get his son away from the influence of a recently initiated fraternity boy. It is exceedingly difficult for a member of such a society to break off the friendship of fraternity companions. Friendships of young people of high school age need to be

subject to revision from time to time. As a rule they are too young to choose life-long friends in this way.

We owe it to the democratic spirit of the public school more than to all other influences that we are able to make one nation out of many. The whole trend of secret societies is opposed to this spirit. They divide into cliques, and rivalry puts one against another or all against the non-secret society members. When a choice of pupils for a position is to be decided by pupils, membership in a particular society counts for more than fitness for the place. How shall we strengthen this Americanizing spirit in the face of a spirit of seclusion? How are we to settle the race problem when cliques are formed upon less marked distinctions?

I am thoroughly convinced that the whole trend of influence of secret societies is opposed to the unifying influence of our public schools.

PRINCIPAL VOLAND, of Grand Rapids:

At Grand Rapids we have a few secret societies in the high school. We do not seek to have faculty supervision, such as they have at Lewis Institute. We have, however, a feature in connection with the societies which we greatly deplore, and that is the down town frat rooms. These are under the supervision of neither the faculty nor the parents. The school has been acting for a number of years under the idea that inasmuch as these societies held their meetings outside of school hours, therefore they were matters in which the parents were the more greatly concerned and for which they alone were responsible.

When we consider the amount of partisanship

in our country's politics, is it to be wondered at that the children are also divided into factions? As elsewhere, there are of course combinations in elections in the high school, but we insist that there shall be perfect honesty from the time of the nominations to the declaring of the result. Of course it is sometimes true that the offices of the school are not filled by the best pupils in the class.

However, taking it all in all, we think that the thing that we should guard against most, and which is the source of the greatest danger to the boy, is the down town frat room.

PROFESSOR WALDO, Purdue University:

I want in the first place to express from the college standpoint my very high appreciation of what has been said in these two most excellent papers. It seems to me the discussion has been acute, yet I do not believe that all has been said for or against Greek letter societies. Mr. Morrison, in giving the purpose of these fraternities, has omitted an important factor in their history. He has not gone back far enough. In so far as they now exemplify their original purpose I believe they have much in them that is excellent. They appeared somewhere in the decade of the thirties in the last century. Other causes than exclusiveness and petty aristocracy generated them. No one would say that the Methodists form an objectionable society, yet when John Wesley founded that sect at Oxford in the 18th century, he almost instituted a college fraternity in its earlier meaning. He banded a number of men together for higher service.

The fraternity originating at Hamilton College in those early days was not meant to mark some selfish distinction but to intensify character for unselfish service. Other college fraternities had a similar beginning — the old fraternities so largely founded in New England — yet I fear there has been a marked deterioration.

While I am a fraternity man and prize highly many of the associations that fraternity has brought to me, I feel there has been a gradual slipping away from early ideals — the appearance of questionable if not unworthy motives. In its later developments, New England education tries to pick out the best man, educate him, and make an aristocrat of him.

Our North Central Colleges would lift the masses and labor for a high level of democracy. Wherever our western ideals prevail, our modern fraternity with its exclusiveness and invidious distinctions is apt to be a disturber of academic peace and effort.

Like many other eastern ideas in western schools they do not seem to serve any good purpose. If, in the form often developed in the West, we must recognize in them an irrepressible evil, certainly the methods practiced in Lewis Institute are worthy of all praise. Like other student organizations they should be under the control and supervision of the faculties in order that the good in them may be fostered and the evil as far as possible eliminated.

PRINCIPAL ARMSTRONG:

Pardon me, but in the paper of Dr. Lewis, he referred to an election of a pupil in a school for some place in which he stated he did not believe the spirit

of the fraternities entered, but he did not tell us whether a fraternity man or a non-fraternity man was elected.

DR. LEWIS:

By a vote of seven majority in the whole school, the non-fraternity man was beaten.

The Association then listened to a discussion of the question, "Should Normal Schools undertake the Preparation of Teachers for Secondary Schools?" by President L. H. Jones of the Michigan Normal College, Ypsilanti, and Dean A. Ross Hill, of the Teachers' College, University of Missouri.

PRESIDENT JONES:

I shall try, as briefly as may be, not to make an extended statement of all phases of this question, but rather to open it up for full and free discussion by the Association. I remember that some years ago a somewhat celebrated American statesman said this nation was confronted by a *condition* and not a *theory*. I feel that we are confronted in the various phases of this discussion by *both a condition and a theory*; and I shall try briefly to state certain vital points in connection with each phase.

As to certain phases of the condition: If you will examine the very excellent paper on the question of "The Preparation of Secondary Teachers," by Professor Dexter, of the University of Illinois, contained in the current year book of the National Society for the Scientific Study of Education, you will find certain valuable conclusions and very suggestive data. In the course of the discussion, Professor Dexter says that the extensive investigation which he made

shows that of all the teachers now at work in the secondary schools of this country, a little less than six per cent have had professional training from the pedagogical departments and schools of education in the colleges and universities, in addition to graduation from those institutions; and that a little more than twelve per cent of the secondary teachers now teaching in the schools of this country are graduates of normal schools. It would seem, in view of these facts, that the topic should have been changed slightly in its wording so as to stand, "Should Normal schools *continue* the preparation of teachers for secondary schools, now that colleges and universities are establishing chairs of pedagogy and departments of education and are attempting to supplement their academic work with professional training for secondary teachers?"

A further phase of this same question to which I have just alluded seems to me to be of extreme importance. If we concede the fact, which no one doubts, that many of the secondary teachers now in the schools have been engaged for some years in their work and therefore had no opportunity for training when they began, it still remains a fact that more than fifty per cent of the secondary teachers now entering upon their work are utterly without any professional training of any kind, whether from universities or colleges in their educational departments, or from normal schools. It seems to me therefore that it should be our purpose, for the present at least, to use all agencies now available for the training of secondary teachers.

Under the second subdivision, that of *theory*, our topic seems to me to refer to the best agencies for the preparation of secondary teachers, and therefore immediately to raise the question of the comparative efficiency for the training of secondary teachers, of normal schools and educational departments of colleges and universities. Of course, it is impossible, in the few minutes at my disposal, to discuss fully so great a question. I shall limit myself to speaking of one or two vital defects in each of these classes of institutions, and to a statement of certain great capacities found in each of these agencies. Of course, when one comes to speak of normal schools it must be said that there is a wide range and a marked difference between normal schools in the lower class and those having more extensive courses, better equipment, and more competent faculties. My experience is that the range from poor to good is rather greater among normal schools than among any other educational institutions of this country. It must, of course, therefore be admitted that if we are to talk about the excellent results in the preparation of secondary teachers in normal schools, we must be referring to the work done by those of higher grade or better class—especially to normal colleges with equipment and faculty which are equivalent to those in our colleges or smaller universities. A number of the normal schools of this country have now placed themselves fully upon such level; but few of them, however, have courses of study sufficiently extended to give the academic training desirable for secondary teachers. Here has, in general, been their defect, namely, deficient scholarship. A few of them, how-

ever, have quite recently made arrangements to extend their courses and give quite sufficient academic training for teachers of the first two or three years in high school, and a very few of them for the full four years. Wherever a normal school has courses of academic and professional work of sufficiently high grade, such institution has a decided advantage over chairs of pedagogy and educational departments in colleges and universities—namely, the equipment for the practical training of these teachers in observation and teaching in the training school. In the Michigan State Normal College, with which I am connected, this training school includes the ninth and tenth grades as well as all elementary grades, thus giving opportunity for students in the Normal College to keep in vital touch with a real high school while pursuing their professional training; and the further opportunity of attempting to make application of the principles of education which they have learned, while they are in range of criticism from special teachers. I consider this a matter of vital importance in the training of teachers. Otherwise there is a very great fear that there will always remain a wide gulf between the theory which one has learned in respect to education and the actual ability to apply this theory in the daily work of the school room. I have now indicated the chief defect and chief excellence of the normal school in its attempt to train secondary teachers. My experience of twenty years in the selection and supervision of secondary teachers has convinced me that in the best normal schools the advantage which I have here indicated outweighs all other considerations for teachers in the ninth and

high school in its daily routine work. He does not have the opportunity to catch the spirit of the modern high school. He has no opportunity to try to teach under conditions which would enable some experienced critic to assist him rapidly to make application of the theory which he has studied. The result is, as I have before hinted, that there is great danger that he may never make practical application of what has been taught him in the educational department of the college or the university. The remedy of this defect seems to me to be the establishment in place of more chairs of pedagogy or departments of education, great schools of education. This can be done, perhaps, only in the larger universities, for such school of education will include all grades in the public school, including the high school, as a laboratory, comparable to the well equipped laboratories in physics and chemistry found in the great universities. Here the student throughout his course may find himself in vital contact with a good school, and may, before graduation, have an opportunity to practice his theory under expert criticism. When these changes herein suggested have been made, the school of education in a great university will have become the best possible means for the training of secondary teachers.

DEAN HILL:

I do not think it will be necessary for me to speak at any length on this topic, for I find myself in such general agreement with the gentleman who preceded me that I wish only to emphasize some points already made by him.

President Jones has remarked that normal schools vary greatly in their standards. On this account I find it necessary to discuss separately the different types of normal schools, for what is true of one does not of necessity hold true of others. The most common type of normal schools has a three or four years' course of academic and professional study based upon the work of the elementary grades. It admits students directly from the rural schools and from the eighth grade of town schools; and its course of study on the academic side is confined chiefly to the mathematics, literature, history, and science of the high school curriculum. However scholarly and efficient its faculty, and however well equipped its library and laboratories, it can be nothing but a secondary school with professional training for teachers attached. There are secondary schools in this Association whose faculties and equipment are equal to our good colleges, for instance, the high schools of Kansas City and St. Louis in my own state, but these schools claim the rank of secondary schools; and the same rank must be given to normal schools of the class I have just described. This description of them answers the question whether they should attempt to train teachers for secondary schools. Their graduates certainly cannot claim the requisite scholarship for secondary school work.

If it is urged that the students who attend these normal schools are more mature on the average than secondary school pupils, it must be noted that maturity cannot be measured by lapse of years and that it is easy to give too much weight to this argument, though I acknowledge that it has some force. My

own experience leads me to believe that the graduates of schools of this class are little in advance, so far as scholarship is concerned, of graduates of good high schools. They have not sufficient knowledge of subject matter for the purposes of high school instruction.

Sometimes we are told that while the subject matter taught in these normal schools is practically the same as that taught in the secondary schools, it is the professional study of subjects that the normal schools stand for, and this necessitates the consideration of the algebra, geometry, grammar, etc., of the secondary school course. Now of course the professional study of the high school subjects is important for the high school teacher, but this way of regarding subjects is possible only after the student has grown beyond the stage of scholarship which these subjects themselves represent. As a matter of fact these normal schools confine their professional study of subject matter to the elementary school branches. From every point of view it seems unwise for schools of this class to attempt the preparation of secondary school teachers.

There is another type of normal school which requires about two years of high school work for entrance and builds a four years' course upon that, covering the subject matter of the last two years of the high school and the first two years of college, along with the study of psychology and education. This sort of school can prepare teachers for the small high schools where versatility rather than special knowledge is demanded. Indeed, owing to the fact that the high school instruction is still quite fresh in

mind and that they have not yet narrowed their field of interest through specialization, the graduates of such schools are likely for a few years to succeed better in small high schools than do teachers of equal experience but greater scholarship. But their scholarship is too meager for teaching in large high schools where departments are well differentiated and where special knowledge can and should be demanded. In general there is one disadvantage belonging to any school of this type as compared with a university, in the training of teachers for secondary schools. The atmosphere of a university, with its departments of law, medicine, engineering, etc., is better fitted to give that perspective, that sense of relative values, that large-mindedness which is needed in the one who is to guide youth in the shaping of ambitions, in the selection of a profession, and similar matters which are likely to confront the high school pupil. On the whole, then, it seems advisable for even the stronger normal schools to aim primarily to train teachers for the elementary schools. But I would not have them lose sight entirely of the secondary school field. Some of their students will be better fitted by nature for secondary school work, and they should be given a chance. It seems altogether feasible, by some differentiation of the work, for one institution to prepare teachers for both elementary and secondary schools, and to keep the latter in mind will tend to the maintenance of higher standards of scholarship throughout the normal school.

But if even the strongest normal schools do not afford adequate training for teachers in secondary

schools, what about the universities which should be doing this work? They certainly are not living up to their opportunities, not discharging their full duty to the communities that support them. One professor of education can do little to develop professional enthusiasm and skill, without facilities for observation and practice at the command of his students. The university graduate, even if he has taken courses in history and theory of education, must waste much time at the outset of his teaching career in learning things regarding teaching and management that should be familiar matters to him before he undertakes school teaching on his own account. These things should be learned while he is still under the guidance and supervision of maturer and wiser men. The strong universities should all organize strong professional departments for teachers, schools of education or teachers' colleges, equipped with facilities for observation and practice especially in the field of high school work, and should make these colleges co-ordinate in rank with those of law, medicine, etc. If they do not do this the normal schools must extend their courses and capture the whole field so far as the training of teachers is concerned.

PROFESSOR SCOTT, University of Michigan:

The preceding speakers have, I believe, overlooked, or at least failed to mention, a certain feature of university instruction which to some extent furnishes a substitute for a teachers' college. I refer to the so-called "teachers' courses." In the University of Michigan such courses are now given in all of the leading subjects that are taught in secondary schools. I have myself for many years offered a

teachers' course in Rhetoric and English Composition, and it is elected annually by from 60 to 70 students. It is not a course in composition or in the theory of rhetoric; it is a strictly pedagogical course, that is, the lectures are on methods of teaching. Moreover every member of the class who has not already taught is compelled to do some teaching under direction. I believe I am not wrong in saying that this was the first class in this country in which students were required to do practice teaching in a secondary school.

PRESIDENT JONES:

What Mr. Scott says meets part of the objection which I was making. In the Department which Professor Scott presides over in the University of Michigan the course is on right lines; and such a spirit in the universities would entirely change their relation to the work of secondary schools.

PRINCIPAL HARRIS:

Mr. President: If you desire I can give you a short oral report of my meeting as delegate from this Association with the College Entrance Examination Board.

President Bliss: The Association will be glad to hear the report.

Principal Harris: I certainly appreciate the honor of the appointment and thank the Executive Committee. I shall wish to be of some service in the position and in order to be, must attend all the meetings and keep in close touch with the work.

Your representative was called first to a meeting of the Board on November 12, 1904. Perhaps a state-

ment of the printed order of business will best show you what was done. It was as follows:

- I. Roll Call.
- II. Minutes of Meeting of May 7, 1904.
- III. Communication from Secretary:
 1. Letters from absent members.
 2. Progress of work of the Board.
 3. Financial Statement.
- IV. Appointment of Auditing Committee.
- V. Communications from Executive Committee:
 1. List of examiners for 1905.
 2. Appropriation for 1905.
 3. Appointment and compensation of readers for 1905.
 4. Repayment on account of loan.
- VI. Reports from special committees:
 1. Committee on proposed changes in the requirements in Latin and Greek.
 2. Committee on time-schedule of examinations.
- VII. Annual election of officers.
- VIII. Miscellaneous.

There was considerable discussion on the proposed changes in the requirements of Latin and Greek. The report was finally referred to a committee. At the close of the meeting Dr. Butler entertained the Board at luncheon at the University.

Your representative has been called twice since the meeting in November but was unable to go. Another meeting has been called for April 8th and he expects to be in attendance at that time.

At the meeting of the Association of 1904, something was said about bringing before the College Board the views of the Association on the plan of certification to colleges. I wish to say that I am very much in sympathy with the work of the College Board, that I agree with the sentiment expressed in President Bliss's address of yesterday in reference to this Board and the Central Association and I would also recommend that a closer union be established with the Board. I believe the two can work in harmony in the North Central district even.

I wish to ask for more definite instructions in regard to the resolutions, passed yesterday, in reference to the College Entrance Requirements in English.

On motion the report was adopted, and on further motion it was ordered that the expenses of delegates of this Association to the College Entrance Examination Board be paid by the Association.

The Committee on Time and Place of Meeting reported as follows:

We recommend that the next meeting of this Association be held in the city of Chicago on the last Friday and Saturday of March, 1906. We also recommend that the Executive Committee be given authority to change the date of the meeting in case any necessity for so doing should arise, and also to determine in what place in Chicago the meeting shall be held.

E. W. Coy, *Chairman.*

April 1, 1905.

On motion, the report was adopted.

The committee appointed to audit the accounts of the Treasurer reported that they had examined the accounts and had found them correct. The report of the Treasurer follows:

**REPORT OF THE TREASURER OF THE ASSOCIATION
FOR THE YEAR ENDING MARCH 31, 1905.**

RECEIPTS.

Cash on hand at date of last report.....	\$21 72
Received from the sale of reports and blanks....	20 26
Received from eighty-two \$3.00 memberships....	246 00
Received from eight \$5.00 memberships.....	40 00
Received from fourteen \$10.00 memberships.....	140 00

Total **\$467 98**

DISBURSEMENTS.

Postage	\$6 00
Express	2 62
Exchange	20
Expenses of members of committees.....	84 05
Printing	257 01

Total **349 88**

Cash on hand **\$118 10**

J. E. ARMSTRONG, Treasurer.

March 31, 1905.

The Executive Committee recommended for election to institutional membership the following:

The La Salle and Peru Township High School, Illinois, T. J. McCormack, Principal.

Lawrence University, Appleton, Wisconsin, Samuel Plantz, President.

The Yankton, South Dakota, High School.

The North High School, Columbus, Ohio, C. D. Everett, Principal.

The Aurora, (Ill.) East Side High School, C. L. Phelps, Principal.

The Joliet, (Ill.) Township High School, J. S. Brown, Principal.

The William McKinley High School, St. Louis, Missouri, G. B. Morrison, Principal.

On motion the Secretary was instructed to cast the ballot of the Association for the above named institutions and they were declared elected to institutional membership.

On recommendation of the Executive Committee the following were elected to individual membership: Professor Herbert F Fisk, Northwestern University; Secretary G. M. Jones, Oberlin College; Joseph D. Elliff, High School Inspector, University of Wisconsin; George H. Locke, Editor of the School Review.

President Thwing offered the following resolution, which was adopted:

The members of this Association desire to express to their fellow member, President Harper, their gladness in the tidings of his improved health, and the sense of hopefulness that, after a swift convalescence he may be able to renew his great work with increased power.

President Bliss announced the following appointments:

Delegates to the English Conference: Professor F. N. Scott, Principal E. L. Harris, Principal E. W. Coy. Alternates: Professor M. W. Sampson, Principal L. C. Hull, Principal F. B. Pearson.

Delegate to the College Entrance Examination Board: Principal E. L. Harris.

**Members of the Commission on Accredited Schools,
1906-1909: Chancellor E. B. Andrews, President
George E. MacLean, President J. R. Kirk, Director
G. N. Carman.**

The present membership is as follows:

THE COMMISSION ON ACCREDITED SCHOOLS.

1903-1906—Dean H. P. Judson, of the University of Chicago; President W. L. Bryan, of the University of Indiana; Superintendent A. F. Nightingale, of Chicago; Superintendent C. N. Kendall, of Indianapolis.

1904-1907—Dean E. A. Birge, of the University of Wisconsin; President J. H. Baker, of the University of Colorado; Inspector A. S. Whitney, of the University of Michigan; Principal E. L. Harris, of Cleveland.

1905-1908—President E. B. Andrews, of the University of Nebraska; President G. E. MacLean, of the University of Iowa; President J. R. Kirk, of the Missouri State Normal School, Kirksville; Director G. N. Carman, of the Lewis Institute, Chicago.

1905-1906—Professor J. V. Denney and Inspector W. W. Boyd of the Ohio State University; President C. F. Thwing and Inspector Bowen, of Western Reserve University; Secretary G. M. Jones, of Oberlin College; Principal E. W. Coy, of the Hughes High School, Cincinnati; President J. B. Angell, of the University of Michigan; Superintendent S. O. Hartwell, of Kalamazoo; Principal F. L. Bliss, of the Detroit University School; Inspector H. A. Hollister, of the University of Illinois; Professor G. E. Vincent, of the University of Chicago; Professor H. E.

Griffith, of Knox College; Professor W. R. Bridgeman, of Lake Forest College; Principal C. W. French, of the Hyde Park High School, Chicago; Principal J. E. Armstrong, of the Englewood High School, Chicago; Professor J. A. James, of Northwestern University; Inspector A. W. Tressler, of the University of Wisconsin; President E. D. Eaton, of Beloit College; Inspector G. B. Aiton, of Minnesota; Inspector J. F. Brown, of the University of Iowa; President H. H. Seerley, of the State Normal School, Cedar Falls; Professor A. Ross Hill, of the University of Missouri; Professor M. S. Snow, of Washington University; Superintendent F. L. Soldan, of St. Louis; Professor L. Fossler, of the University of Nebraska; Inspector T. M. Hodgman, of Nebraska; Professor W. H. Carruth, of the University of Kansas; Principal W. H. Smiley, of the Denver High School.

The Nominating Committee recommended the following for election to the offices of the Association for the ensuing year:

FOR PRESIDENT:

Chancellor Geo. E. McLean,
University of Iowa.

FOR VICE PRESIDENTS:

WISCONSIN —

President Van Hise,
University of Wisconsin.
Principal C. E. McLenegan,
West Division High School, Milwaukee.

MICHIGAN —

President James B. Angell,
University of Michigan.
President L. H. Jones,
State Normal College, Ypsilanti.

OHIO —

President Charles William Dabney,
University of Cincinnati.
Principal Frank B. Pearson,
East High School, Columbus.

IOWA —

Dean J. H. T. Main,
Iowa College, Grinnell.
Principal Crusenbury,
Des Moines High School.

ILLINOIS —

President E. J. James,
University of Illinois.
Principal J. Stanley Brown,
Joliet Township High School.

MISSOURI —

President J. R. Kirk,
State Normal School, Kirksville.
Professor A. Ross Hill,
State University, Columbia.

NEBRASKA —

Professor T. M. Hodgman,
University of Nebraska, Lincoln.

INDIANA —

Professor T. F. Moran,
Purdue University, Lafayette.
Principal G. W. Benton,
Shortridge High School, Indianapolis.

KANSAS —

President Frank Strong,
State University, Lawrence.
President Norman Plass,
Washburn College, Topeka.

MINNESOTA —

State Inspector George B. Aiton,
Minneapolis.
Principal E. V. Robinson,
Central High School, St. Paul.

COLORADO —

Dean Edward S. Parsons,
Colorado College, Colorado Springs.

OKLAHOMA —

President David R. Boyd,
State University, Norman.

FOR SECRETARY:

Professor J. V. Denney,
Ohio State University, Columbus.

FOR TREASURER:

Principal J. E. Armstrong,
Englewood High School, Chicago.

FOR MEMBERS OF EXECUTIVE COMMITTEE:

Principal F. L. Bliss, Detroit University School, Detroit, Mich.

Professor F. N. Scott, University of Michigan, Ann Arbor.

President E. J. James, University of Illinois, Champaign.

Principal G. W. Benton, Shortridge High School, Indianapolis,
and the President, the Secretary and the Treasurer, *ex-*
officio.

On motion the Secretary was instructed to cast
the ballot of the Association for the persons above-
named and they were thereupon declared elected.

President Bliss: I feel that no greater honor
is delegated to me in connection with the holding of
this office than of turning the same over to such a
renowned successor. I am very glad to introduce to
you, President MacLean.

President MacLean: My first wish is that this
valuable Association may continue influential and
full of power. This Association is one that has been
dear to me. With all my heart I thank you personally
for bestowing the honor of its presidency upon
me. I recognize that it is not a personal gift; that
you are acknowledging the great state of Iowa. I
trust you will help us in Iowa to recognize that we
are the source of more than one "Iowa Idea." It
has been a sort of joke with seriousness behind it,

that Iowa was attached to the high note of C, because Iowa has more of certain things beginning with C than any other state—Corn, Cattle, Chickens, Coin in banks, influential Congressmen, and two Cabinet members. We much desire to add the great C standing for genuine Culture, for which this Association stands. By the increased co-operation of the educators in the imperial states of this mid-west, we may hope that the keynote of the address of the president of this year, in reviewing the work of this Association for its ten years, the keynote of deeds rather than mere talk, may ring through the second decade of our history. The close affiliation of secondary schools, colleges and universities, public and private, with the development of school and college inspection and an accrediting system, is to be given over as no mean contribution to Amercian education at this moment of its increasing influence in world-wide education.

The Association then adjourned.

LIST OF MEMBERS.

INSTITUTIONS.

(c. m. means charter member.)

OHIO.

Ohio State University, c. m., Columbus, President W. O. Thompson.
Western Reserve University, c. m., Cleveland, President Chas. F. Thwing.

Oberlin College, c. m., Oberlin, President H. C. King.
Ohio Wesleyan University, c. m., Delaware, President Herbert Welsh.
Denison University, '99, Granville, President Emory W. Hunt.
University of Cincinnati, '99, Cincinnati, President C. W. Dabney.
Miami University, '04, Oxford, President Guy P. Benton.

Central High School, c. m., Cleveland, Principal Edward L. Harris.
Hughes High School, '96, Cincinnati, Principal E. W. Coy.
Steele High School, '96, Dayton.
High School, '96, Toledo, Principal Wm. T. Harris.
Walnut Hills High School, '99, Cincinnati, Principal W. Taylor
Harris.
Woodward High School, '99, Cincinnati, Principal Geo. W. Harper.
West High School, '00, Cleveland Principal Theo. H. Johnston.
East High School, '02, Columbus, Principal F. B. Pearson.
University School, '02, Cleveland, Principal George D. Pettee.
South High School, '02, Cleveland, Principal G. A. Ruetenik.
Lincoln High School, '02, Cleveland, Principal J. W. McLane.
East High School, '02, Cleveland, Principal B. U. Rannels.
Raven High School, '03, Youngstown, Principal W. L. Griswold.
North High School, '05, Columbus, Principal C. D. Everett.

MICHIGAN.

University of Michigan, c. m., Ann Arbor, President Jas. B. Angell.
Albion College, c. m., Albion, President Samuel Dickie.
Central High School, c. m., Grand Rapids, Principal A. J. Volland.
Michigan Military Academy, c. m., Orchard Lake, Principal L.
C. Hull.
High School, '95, Kalamazoo, Superintendent S. O. Hartwell.
East Side High School, '95, Saginaw, Superintendent E. C. War-
riner.
Detroit University School, '00, Detroit, Principal Frederick L. Bliss.

INDIANA.

Indiana University, c. m., Bloomington, President W. L. Bryan.
Wabash College, c. m., Crawfordsville, President W. P. Kane.
High School, c. m., LaPorte, Superintendent J. W. Knight.
High School, '96, Fort Wayne, Principal C. F. Lane.
Girls' Classical School, '00, Indianapolis, Principal May W. Sewall.
High School, '01, LaFayette, Superintendent E. Ayers.
Howe School, '04, Lima, Rector T. H. McKenzie.
Shortridge High School, Indianapolis, Principal G. W. Benton.

ILLINOIS.

University of Illinois, c. m., Champaign, President E. J. James.
University of Chicago, c. m., Chicago, President Wm. R. Harper.
Northwestern University, c. m., Evanston, President —
Lake Forest College, c. m., Lake Forest, President R. D. Harlan.
Knox College, '96, Galesburg, President —
High School, c. m., Evanston, Principal Henry L. Boltwood.

Northwestern Academy, c. m., Evanston, Principal A. H. Wilde.
Morgan Park Academy, c. m., Morgan Park, Dean W. J. Chase.
Manual Training School, c. m., Chicago, Director H. H. Belfield.
Harvard School, c. m., Chicago, Principal John J. Schobinger.
High School, c. m., Peoria, Superintendent Newton C. Dougherty.
Lake Forest School, Lake Forest, Head Master J. C. Sloan.
West Division High Schaal, '96, Chicago, Principal C. M. Clayberg.
Hyde Park High School, '95, Chicago, Principal C. W. French.
Lake View High School, '96, Chicago, Principal B. F. Buck.
Englewood High School, '96, Chicago, Principal J. E. Armstrong.
Ottawa Tp. High School, '96, Ottawa, Principal J. O. Leslie.
Lyons Tp. High School, '96, La Grange, Principal Cole.
Lewis Institute, '95, Chicago, Director G. N. Carman.
Streator Tp. High School, '97, Streator, Principal —
Bradley Polytechnic Institute, '97, Peoria, Director E. O. Sisson.
High School, '98, Elgin, Principal E. J. Kelsey.
Lake High School, '99, Chicago, Principal Edward F. Stearns.
Marshall High School, '99, Chicago, Principal Louis J. Block.
Kewanee High School, '04, Kewanee, Principal J. B. Cleveland.
LaSalle and Peru Tp. High School, '05, Principal T. J. McCormack.
East Side High School, '05, Aurora, Principal C. L. Phelps.
Township High School, '05, Joliet, Principal J. Stanley Brown.
Cicero-Stickney Tp. High School, Clyde, Principal H. V. Church.

WISCONSIN.

University of Wisconsin, c. m., Madison, President Charles R. Van Hise.
Beloit College, c. m., Beloit, President Edward D. Eaton.
Ripon College, '04, President Richard C. Hughes.
Milwaukee-Downer College, '97, Milwaukee, President Ellen C. Sabin.
Milwaukee Academy, '97, Milwaukee, Principal J. H. Pratt.
Racine High School, '05, Racine, Principal E. W. Blackhurst.
West Division High School, '04, Milwaukee, Principal C. E. McLenegan.
North Division High School, '04, Milwaukee, Principal R. E. Krug.
Lawrence University, '05, Appleton, President Samuel Plantz.

MINNESOTA.

Humboldt High School, St. Paul, Principal H. S. Baker.
Central High School, '04, St. Paul, Principal E. V. Robinson.

IOWA.

State University of Iowa, c. m., Iowa City, President Geo. E. MacLean.

Cornell College, c. m., Mt. Vernon, President Wm. F. King.
State Normal School, c. m., Cedar Falls, President D. S. Wright.
Iowa College, '95, Grinnell, President J. H. P. Main.

MISSOURI.

University of Missouri, c. m., Columbia, President Richard H. Jesse.
Washington University, c. m., St. Louis, Chancellor Winfield S. Chaplin.

Drury College, '98, Springfield, President Homer T. Fuller.
Missouri Valley College, '98, Marshall, President Wm. H. Black.
High School, '96, St. Louis, Principal W. J. S. Bryan.
Westminster College, '00, Fulton, President John H. McCracken.
Mexico High School, Mexico, Superintendent D. A. McMillan.
Manual Training High School, '00, Kansas City.
Mary Institute, '00, St. Louis, Principal E. H. Sears.
Kirkwood High School '00, Kirkwood, Superintendent R. G. Kinkead.
Park College, '02, Parkville, President Lowell M. McAfee.
Academy of Drury College, '04, Springfield, Principal C. P. Howland.
Wm. McKinley High School, '05, St. Louis, Principal G. B. Morrison.

NEBRASKA.

University of Nebraska, '96, Lincoln, President E. Benj. Andrews.

KANSAS.

University of Kansas, '96, Lawrence, Chancellor Frank Strong.

COLORADO.

University of Colorado, '96, Boulder, President Jas. H. Baker.
Colorado College, '96, Colorado Springs, President W. F. Slocum.
High School No. 1, '96, Denver, President Wm. H. Smiley.

OKLAHOMA.

University of Oklahoma, '01, Norman, President David R. Boyd.

SOUTH DAKOTA.

High School, Yankton, Principal R. C. Shellenbarger.

INDIVIDUAL MEMBERS.

OHIO.

Charles S. Howe, '02, President of Case School of Applied Science,
Cleveland.
Jos. V. Denney, '03, Dean of the College of Arts, Philosophy and
Science, Ohio State University, Columbus.

W. W. Boyd, '03, High School Visitor, Ohio State University, Columbus.

D. R. Major, '04, Professor in Ohio State University, Columbus.

G. M. Jones, '05, Secretary of Oberlin College, Oberlin, Ohio.

MICHIGAN.

W. W. Beman, '95, Professor in the University of Michigan, Ann Arbor.

Fred N. Scott, '98, Professor in the University of Michigan, Ann Arbor.

L. H. Jones, '95, President of the State Normal School, Ypsilanti.

A. S. Whitney, '03, High School Inspector, University of Michigan, Ann Arbor.

Delos Fall, '03, Superintendent of Public Instruction, Lansing.

INDIANA.

Clarence A. Waldo, '95, Professor in Purdue University, Lafayette.

Carl Leo Mees, '98, President of Rose Polytechnic, Terre Haute.

J. J. Mills, '99, President of Earlham College, Richmond.

Edward Ayers, '99, Superintendent of Schools, Lafayette.

W. W. Parsons, '99, President of the State Normal School, Terre Haute.

Stanley Coulter, '01, Professor in Purdue University, Lafayette.

C. N. Kendall, '01, Superintendent of Schools, Indianapolis.

T. F. Moran, '02, Professor in Purdue University, Lafayette.

ILLINOIS.

S. A. Forbes, '95, Dean, University of Illinois, Champaign.

A. V. E. Young, '95, Professor in Northwestern University, Evanston.

Thomas C. Chamberlin, '95, Professor in the University of Chicago, Chicago.

Henry P. Judson, '85, Professor in the University of Chicago, Chicago.

Marion Talbot, '97, Dean of Women, University of Chicago, Chicago.

Wm. A. Greeson, '97, Dean of Lewis Institute, Chicago.

F. W. Gunsaulus, '96, President of Armour Institute, Chicago.

U. S. Grant, '02, Professor in Northwestern University, Evanston.

Thomas F. Holgate, '99, Professor in Northwestern University, Evanston.

J. A. James, '99, Professor in Northwestern University, Evanston.

Henry Crew, '99, Professor in Northwestern University, Evanston.

A. F. Nightingale, c. m., County Superintendent, 1997 Sheridan Road, Chicago.

- R. E. Hieronymus, '03, President of Eureka College, Eureka.
H. A. Hollister, '03, High School Inspector, University of Illinois, Champaign.
E. G. Cooley, '04, Superintendent of Schools, Chicago.
H. F. Fisk, '05, Professor in Northwestern University, Evanston.
Geo. H. Locke, '05, Editor of the School Review, University of Chicago.

WISCONSIN.

- Edward A. Birge, '96, Professor in the University of Wisconsin, Madison.
M. V. O'Shea, '98, Professor in the University of Wisconsin, Madison.
A. W. Tressler, '03, High School Inspector, University of Wisconsin, Madison.

MINNESOTA.

- George B. Aiton, '97, State Inspector of High Schools, Minneapolis.

IOWA.

- J. F. Brown, '03, High School Inspector, State University, Iowa City.

MISSOURI.

- F. Louis Soldan, '00, Superintendent of Schools, St. Louis.
John R. Kirk, '98, President of the State Normal School, Kirksville.
C. M. Woodward, '99, Professor in Washington University, St. Louis.
Ben Blewett, '03, Assistant Superintendent of Schools, St. Louis.
A. Ross Hill, '04, Dean of Teachers' College, University of Missouri, Columbia.
Joseph D. Elliff, '05, High School Inspector, University of Missouri, Columbia.

NEBRASKA.

- J. W. Crabtree, '04, University of Nebraska, Lincoln.

KANSAS.

- W. A. Davidson, '99, Superintendent of Schools, Topeka.

**CONSTITUTION OF THE NORTH CENTRAL
ASSOCIATION OF COLLEGES AND
SECONDARY SCHOOLS.**

**AS AMENDED AT THE NINTH ANNUAL MEETING,
MARCH 26, 1904.**

ARTICLE I.

NAME.

The name of this Association shall be the North Central Association of Colleges and Secondary Schools.

ARTICLE II.

OBJECT.

The object of the Association shall be to establish closer relations between the colleges and secondary schools of the North Central States.

ARTICLE III.

MEMBERSHIP.

Section 1.—The members of the Association shall consist of the following two classes: First, colleges and universities, and secondary schools. Secondly, individuals identified with educational work within the limits of the Association.

Sec. 2.—Election to membership shall require a two-thirds vote of the members present at any meeting, and shall be made only upon the nomination of the Executive Committee.

Sec. 3.—In the membership of the Association, the representation of higher and of secondary education shall be as nearly equal as possible.

Sec. 4.—An institutional member shall be represented at the meeting of the Association by its executive head, or by some one designated by him in credentials addressed to the Secretary.

Sec. 5.—No college or university shall be eligible to membership whose requirements for admission represent less than fifteen units of secondary work as defined by the Commission on Accredited Schools.

Sec. 6.—No college or university shall be eligible to membership which confers the degree of Doctor of Philosophy or Doctor of Science except after a period of three years of graduate study, not less than two of which shall be years of resident study, one of which shall be at the institution conferring the degree.

Sec. 7.—No secondary school shall be eligible to membership which does not provide fifteen units of secondary work as defined by the Commission on Accredited Schools.

ARTICLE IV.

POWERS.

All the decisions of the Association bearing upon the policy and management of higher and secondary institutions are understood to be advisory in their character.

ARTICLE V.

OFFICERS AND COMMITTEES.

Section 1.—The officers of the Association shall be a President, two Vice-Presidents from each state represented in the Association, a Secretary, a Treasurer, and an Executive Committee consisting of the President, the Secretary, the Treasurer, and four other members elected by the Association.

Sec. 2.—The officers shall be chosen at the annual meeting for the term of one year, or until their successors are elected. The election shall be by ballot.

Sec. 3.—The Executive Committee shall have power to appoint committees for conference with other bodies, whenever in their judgment it may seem expedient.

Sec. 4.—In case an officer holding office as representative of an institutional member severs his connection with the institution represented, he shall at his discretion hold his office until the close of the next regular meeting of the Association.

Sec. 5.—The Executive Committee shall have authority to fill a vacancy in any office, the officer elected by the committee to hold office until the close of the next annual meeting.

ARTICLE VI.

DUTIES OF OFFICERS.

Section 1.—The President, or in his absence one of the Vice-Presidents selected by the Executive Committee, shall preside at

the meetings of the Association and shall sign all orders upon the Treasurer.

Sec. 2.—The Secretary shall keep a record of the proceedings of the Association and attend to all necessary correspondence and printing.

Sec. 3.—The Treasurer shall collect and hold all moneys of the Association and pay out the same upon the written order of the President.

Sec. 4.—The Executive Committee shall make all nominations for membership in the Association, fix the time of all meetings not otherwise provided for, prepare programmes and act for the Association when it is not in session. All the acts of the Executive Committee shall be subject to the approval of the Association.

ARTICLE VII.

MEETINGS.

There shall be an annual meeting of the Association and such special meetings as the Association may appoint.

ARTICLE VIII.

MEMBERSHIP FEE.

To meet expenses, an annual fee of \$10 shall be paid by each university, \$5 by each college and \$3 each by all other members, and each member shall have one vote.

ARTICLE IX.

QUORUM.

One-fourth of the members of the Association shall constitute a quorum.

ARTICLE X.

AMENDMENTS.

This constitution may be amended by a three-fourths vote at any regular meeting, provided that a printed notice of the proposed amendment be sent to each member two weeks before said meeting.

OFFICERS FOR THE YEAR 1905-1906.

PRESIDENT:

Chancellor Geo. E. McLean,
University of Iowa.

VICE PRESIDENTS:

WISCONSIN—

President Van Hise,
University of Wisconsin.
Principal C. E. McLenegan,
West Division High School, Milwaukee.

MICHIGAN—

President James B. Angell,
University of Michigan.
President L. H. Jones,
State Normal College, Ypsilanti.

OHIO—

President Charles William Dabney.
University of Cincinnati.
Principal Frank B. Pearson,
East High School, Columbus.

IOWA—

Dean J. H. T. Main,
Iowa College, Grinnell.
Principal Crusenbury,
Des Moines High School.

ILLINOIS—

President E. J. James,
University of Illinois.
Principal J. Stanley Brown.
Joliet Township High School.

MISSOURI

President J. R. Kirk,
State Normal School, Kirksville.
Professor A. Ross Hill,
State University, Columbia.

NEBRASKA—

Professor T. M. Hodgman,
University of Nebraska, Lincoln.

INDIANA—

Professor T. F. Moran,
Purdue University, Lafayette.
Principal G. W. Benton,
Shortridge High School, Indianapolis.

KANSAS

President Frank Strong,
State University, Lawrence.
President Norman Plass,
Washburn College, Topeka.

MINNESOTA—

State Inspector George B. Aiton,
Minneapolis.
Principal E. V. Robinson,
Central High School, St. Paul.

COLORADO—

Dean Edward S. Parsons,
Colorado College, Colorado Springs.

OKLAHOMA—

President David R. Boyd,
State University, Norman.

SECRETARY:

Professor J. V. Denney,
Ohio State University, Columbus.

TREASURER:

Principal J. E. Armstrong,
Englewood High School, Chicago.

MEMBERS OF EXECUTIVE COMMITTEE:

Principal E. L. Bliss, Detroit University School Detroit, Mich.
Professor E. N. Scott, University of Michigan, Ann Arbor.
President E. I. James, University of Illinois, Champaign.
Principal, A. W. Benton, Shortridge High School, Indianapolis,
and the President, the Secretary and the Treasurer, *ex-officio*.

REGISTRATION.

ATTON, Geo. B., Minneapolis, Minn.

AMBROSE, Thomas 521 Wabash, Ave., Chicago, Ill.

ARMSTRONG, J. E., Englewood High School, Chicago, Ill.

AUSTIN, E. T., Township High School, Sterling, Ill.

BARDWELL, C. M., High School, East Aurora, Ill.
BEARDSLEY, W. F., Township High School, Evanston, Ill.
BELFIELD, Henry H., Manual Training School, Chicago, Ill.
BELL, Geo. W., Olivet College, Olivet, Mich.
BENTON, Geo. W., Shortridge High School, Indianapolis, Ind.
BENTON, Guy P., Miami University, Oxford, Ohio.
BIRGE, E. A., University of Wisconsin, Madison, Wis.
BLACK, Wm. H., Missouri Valley College, Marshall, Mo.
BLACKHURST, E. W., High School, Racine, Wis.
BLISS, F. L., Detroit University School, Detroit, Mich.
BLOCK, L. J., Marshall High School, Chicago, Ill.
BOYD, David R., University of Oklahoma, Norman, Okla.
BOYD, W. W., Ohio State University, Columbus, Ohio.
BRIDGMAN, W. R., Lake Forest College, Lake Forest, Ill.
BRIGGS, C. P., High School, West Aurora, Ill.
BROWN, J. F., University of Iowa, Iowa City, Iowa.
BROWN, J. Stanley, Township High School, Joliet, Ill.
BRYAN, Wm. J. S., Central High School, St. Louis, Mo.
BRYAN, Mrs. Wm. J. S., 3746 Windsor Place, St. Louis, Mo.
BUCK, B. F., Lake View High School, Chicago, Ill.

CARMAN, A. N., Lewis Institute, Chicago, Ill.
CARRIER, W. O., Carroll College, Waukesha, Wis.
CHAPLIN, W. S., Washington University, St. Louis, Mo.
CHASE, W. J., Academy, Morgan Park, Ill.
CHURCH, H. V., J. Sterling Morton High School, Clyde, Ill.
CLANCY, A. W., Macalester College, St. Paul, Minn.
CLARK, B. F., 378 Wabash Ave., Chicago, Ill.
CLARK, J. S., Northwestern University, Evanston, Ill.
COBB, H. E., Lewis Institute, Chicago, Ill.
COLE, E. R., Lyons Township High School, LaGrange, Ill.
COLLIE, Geo. L., Beloit College, Beloit, Wis.
COY, E. W., Hughes High School, Cincinnati, Ohio.

DABNEY, Chas. W., University of Cincinnati, Cincinnati, Ohio.
DENNEY, J. V., Ohio State University, Columbus, Ohio.
DOWNING, E. C., Macalester College, St. Paul, Minn.
DUVALL, T. G., Ohio Wesleyan University, Delaware, Ohio.

EATON, E. D., Beloit College, Beloit, Wis.
ELLIFF, J. D., University of Missouri, Columbia, Mo.
ELY, Harriett B., J. Sterling Morton High School, Clyde, Ill.
EVERETT, C. D., North High School, Columbus, Ohio.

FINKEL, B. F., Drury College, Springfield, Mo.
FISK, H. F., Northwestern University, Evanston, Ill.
FITCH, Florence M., Oberlin College, Oberlin, Ohio.
FRENCH, C. W., Hyde Park High School, Chicago, Ill.
GILES, F. M., Township High School, DeKalb, Ill.
GOBLE, W. L., High School, Elgin, Ill.
GORE, W. C., University of Chicago, Chicago, Ill.
GOULD, R. R. N., High School, Kalamazoo, Mich.
GULLIVER, Julia H., Rockford College, Rockford, Ill.
GRAY, John W., Northwestern University, Evanston, Ill.
GUYER, M. F., University of Cincinnati, Cincinnati, Ohio.
HALL, A. S., Calumet High School, Chicago, Ill.
HALL, E. J., High School, Calumet, Mich.
HANSER, H. C., High School, Decatur, Ill.
HARLEN, R. D., Lake Forest College, Lake Forest, Ill.
HARRIS, E. L., Central High School, Cleveland, Ohio.
HARRIS, Wm. T., Central High School, Toledo, Ohio.
HARRIS, W. Taylor, Walnut Hills High School, Cincinnati, Ohio.
HAYWARD, T. E., East Side High School, Aurora, Ill.
HICKS, F. E., University of Cincinnati, Cincinnati, Ohio.
HILL, A. Ross, University of Missouri, Columbia, Mo.
HODGMAN, T. Morey, University of Nebraska, Lincoln, Neb.
HOLGATE, T. J., Northwestern University, Evanston, Ill.
HOLLISTER, H. G., University of Illinois, Champaign, Ill.
HOLT, Harriette G., Milwaukee-Dower College, Milwaukee, Wis.
HOWE, Charles S., Case School of Applied Science, Cleveland, Ohio.
HUBBARD, F. G., University of Wisconsin, Madison, Wis.
JACK, Albert E., Lake Forest College, Lake Forest, Ill.
JAMES, E. J., University of Illinois, Champaign, Ill.
JAMES, J. A., Northwestern University, Evanston, Ill.
JOHNSON, Allen, Iowa College, Grinnell, Iowa.
JONES, G. M., Oberlin College, Oberlin, Ohio.
JONES, L. H., State Normal College, Ypsilanti, Mich.
JONES, T. J., High School, Elkhorn, Wis.
JUDSON, H. P., University of Chicago, Chicago, Ill.
KELSEY, E. J., High School, Elgin, Ill.
KIRK, J. R., State Normal School, Kirksville, Mo.
LANCASTER, E. G., Olivet College, Olivet, Mich.
LESLIE, J. O., Township High School, Ottawa, Ill.
LEWIS, E. H., Lewis Institute, Chicago, Ill.
LEWIS, W. A., Central High School, Kansas City, Mo.
LOCKE, G. H., University of Chicago, Chicago, Ill.

MACLEAN, G. E., State University, Iowa City, Iowa.
MAIN, J. H. T., Iowa College, Grinnell, Iowa.
MCAFEE, L. M., Park College, Parkville, Mo.
MEACHAM, Margaret M., 1304 Auditorium, Chicago, Ill.
MORAN, T. F., Purdue University, LaFayette, Ind.
MORISON, G. B., William McKinley High School, St. Louis, Mo.
MOSES, A. B., West High School, Aurora, Ill.
NADAL, T. W., Olivet College, Olivet, Mich.
NIGHTINGALE, A. F., 1897 Sheridan Road, Chicago, Ill.
NYE, W. H., High School, Oberlin, Ohio.
OWEN, V. M., Lewis Institute, Chicago, Ill.
PARKHURST, C. P., Columbus, Ohio.
PARSONS, E. S., Colorado College, Colorado Surings, Col.
PEARSON, F. B., East High School, Columbus, Ohio.
PLASS, Norman, Washburn College, Topeka, Kas.
PHELPS, C. L., East Side High School, Aurora, Ill.
PINCOMB, Helena M., Normal School, Stevens Point, Wis.
RAGSDALE, G. T., Township High School, DeKalb, Ill.
SABIN, Ella C., Milwaukee-Dower College, Milwaukee, Wis.
SALLMAN, W. H., Carleton College, Northfield, Minn.
SANFORD, A. H., State Normal School, Stevens Point, Wis.
ST. JOHN, C. E., Oberlin College, Oberlin, Ohio.
SCOTT, F. N., University of Michigan, Ann Arbor, Mich.
SEELEY, H. H., State Normal School, Cedar Falls, Iowa.
SILVER, W. W., Academy of Washburn College, Topeka, Kas.
SMALL, Albion W., University of Chicago, Chicago, Ill.
SMITH, C. H., Hyde Park High School, Chicago, Ill.
SMITH, F. W., University of Nebraska, Lincoln, Neb.
SNOW, M. S., Washington University, St. Louis, Mo.
STONE, W. E., Purdue University, LaFayette, Ind.
TALBERT, E. L., High School, Racine, Wis.
TAWNEY, G. A., Beloit College, Beloit, Wis.
THORNDIKE, A. H., Northwestern University, Evanston, Ill.
THWING, C. F., Western Reserve University, Cleveland, Ohio.
TRESSLER, A. W., University of Wisconsin, Madison, Wis.
VAN DYKE, A. M., Woodward High School, Cincinnati, Ohio.
VOLLAND, A. J., Central High School, Grand Rapids, Mich.
WALDO, C. A., Purdue University, LaFayette, Ind.
WALLOCK, James, Macalester College, St. Paul, Minn.
WALSH, M. J., High School, Hancock, Mich.

WEIDA, G. F., Ripon College, Ripon, Wis.
WEST, Andrew F., Princeton University, Princeton, N. J.
WHITCOMB, M. W., University of Cincinnati, Cincinnati, Ohio.
WHITNEY, A. S., University of Michigan, Ann Arbor, Mich.
WILDE, A. H., Academy of Northwestern University, Evanston, Ill.
WILSON, J. D., State Normal School, Kirksville, Mo.
WOODWARD, C. M., Washington University, St. Louis, Mo.
WRIGHT, H. C., J. Sterling Morton High School, Clyde, Ohio.
YOUNG, A. V. E., Northwestern University, Evanston, Ill.
YOUNG, Alice, 4717 Gladstone St., Duluth, Minn.

John Street

PROCEEDINGS

OF THE

John Street

ELEVENTH ANNUAL MEETING

OF THE

North Central Association

OF

COLLEGES AND SECONDARY SCHOOLS

*Held at
Chicago, Illinois, March 23 and 24, 1906.*

EDITED BY

JOSEPH VILLIERS DENNEY
SECRETARY OF THE ASSOCIATION

COLUMBUS, OHIO
PUBLISHED BY THE ASSOCIATION
1906



PROCEEDINGS

OF THE

ELEVENTH ANNUAL MEETING

OF THE

North Central Association

OF

COLLEGES AND SECONDARY SCHOOLS

*Held at
Chicago, Illinois, March 23 and 24, 1906.*

EDITED BY

JOSEPH VILLIERS DENNEY
SECRETARY OF THE ASSOCIATION

COLUMBUS, OHIO
PUBLISHED BY THE ASSOCIATION
1906

Copies of the Proceedings of the North Central Association of Colleges and Secondary Schools may be obtained by addressing the Treasurer of the Association; Mr. J. E. Armstrong, Englewood High School, Chicago. The price of single copies is twenty-five cents. The price of the complete set as far as published (twelve numbers, including the report of the Preliminary Meeting for Organization) is \$2.75.

The next meeting of the Association will be held in Chicago, Friday and Saturday, March 29 and 30, 1907.

PRESS OF
THE CHAMPLIN PRINTING CO.
COLLEGE PRINTERS
COLUMBUS, O.

**The
North Central Association
or
Colleges and Secondary Schools.**

Eleventh Annual Meeting, Chicago, March 23 and 24, 1906.

The eleventh annual meeting of the North Central Association of Colleges and Secondary Schools was held in Chicago, Friday and Saturday, March 23 and 24, 1906.

First Session Friday, March 23, 1906.

The Association was called to order at 10 o'clock, a. m. in the Banqueting Hall of the Auditorium Hotel by the President, George Edwin MacLean, Ph. D., LL. D., President of the State University of Iowa.

Prayer was offered by the Reverend Charles F. Thwing, D. D., President of Western Reserve University, Cleveland, Ohio.

President MacLean delivered the annual address as follows:

An American Federation of Learning

GEORGE EDWIN MAC LEAN PH. D., LL. D., PRESIDENT OF
THE STATE UNIVERSITY OF IOWA.

In this age we are partakers in great movements and awed by great names. In the dawn of a new nationalism we hear of the nationalization of educa-

PRESIDENT'S ADDRESS

tion. The socialization of education is the watch-word of the progressive professors of a great tendency. By the doctrine of evolution education is one of the correlating forces of civilization, and the great practical topic becomes that of the correlation of education with civilization. The rapid development of state school systems, all crystallizing too quickly and becoming stationary in statutes, and the straining after a national system amidst the wide diversity of culture, overwhelm our ingenuity and are threatening our future. Alas! an educational system set up in our statutes is the savior in whom we trust!

As over against this peril, this association stands for the nationalization of education by standards, not by statutes. We trust in education with standards. As humble prophets of education gathered in this central city of America, consecrated by the crowning work and death of a Harper, praying that his mantle may fall upon us, we hear the divine call, "Lift up a standard for the peoples."

Catching something of the spirit of the great topics enumerated, and of the work of our most distinguished departed leader, we have chosen the subject of "An American Federation of Learning." As to a true American, labor dignifies, and labor and learning go hand in hand, we are content to parallel in title the American Federation of Labor.

A proper treatment of our simple theme may prepare the way for a realization of the grander topics. Permit me, proceeding by the inductive method, to use a line of work in which this association has accomplished much and which I have had occasion to treat elsewhere. I refer to our system of accrediting schools and other systems of admission to college.

AN AMERICAN FEDERATION OF LEARNING

One of the principal nodes for the federation of education may be found at this point. I therefore afflict you with an abstract of an address given by me at the last session of the National Educational Association upon the topic, "Which is better, the western plan of admitting students to colleges and universities by certificates from duly inspected secondary schools, or by the eastern method of admitting only by examinations conducted by representative boards or otherwise?"

Within a few years it may be determined which plan, with all it implies in shaping far-reaching educational ideals and practices, shall be national. The terms, "western" and "eastern" must not import provincial pride or sound a note of sectionalism. The examination by the separate college of the individual candidate, giving "personal contact" has failed on account of increase in numbers. The College Entrance Examination Board, organized in 1900, examined some 2,100 candidates this year — a Lilliputian effort as compared with the need to examine some 66,000 candidates. It has all the disadvantages of massed examinations, making it a gamble for the entering student and of judgment simply upon paper.

The New England College Certificate Board cares for some 2,000 candidates and has the virtue of resting upon the judgment of the teachers acquainted with the pupil. But it lacks any note of nationality and is without provision for any proper inspection and accrediting the schools.

President Hadley has just announced that for the present, Yale will adhere to the separate examination system. Yet President Hadley personally would give teachers of proved ability the opportunity to

PRESIDENT'S ADDRESS

recommend for provisional admission to the freshman class. Thus President Hadley is not far from the kingdom of the outright accrediting system for which we hope he may become a leader, not only amongst his brethren of the eleven colleges in the New England College Entrance Certificate Board, but throughout the nation. The whole thing might be done if Commissioner Draper of New York and President Butler became his coadjutors.

The so-called "western" is really a development from the German plan. It, in some form, logically accompanied a state public school system crowned by a state university. It has been adopted also by private universities so that it covers the entire territory from the Ohio to the Pacific, and overflows into southern and eastern states. At present there are twelve state or state university inspectors in as many great western states — supplemented by visitors from great private institutions. In the North Central Association of Secondary Schools and Colleges, there has been for six years a Commission on Accredited Schools, at the heart of which is a Board of High School Inspectors. Uniform standards and entrance blanks have been prepared. But now a list of first-class schools meeting the standards of the commission is becoming an accredited list throughout the entire northwest.

The accrediting system has raised the standard of the work done. It has linked the secondary school into one system with higher education. It has given an increase of students entering college, and with better average preparation. At the University of Pennsylvania in the fall of 1901, of those entering by examinations 49 per cent. were conditioned as

AN AMERICAN FEDERATION OF LEARNING

against only 29 per cent. of certificated students. An investigation by Principal Ramsay showed that the certificated students excelled in mental ability five to one. In the general performance of college duties they excelled three to one. Professor Whitney of Michigan found that the average standing of the certificated students was more than one and one-half per cent. higher than for the examined student. Professor T. Gregory Foster, in the report of the Alfred Mosley Commission, rejoices that it is a fundamental principle in American universities that the man who is fit to teach is also to be trusted to examine his own students. He says the accrediting system of the middle west is a most significant plan and one rapidly spreading into the east. In the states where it has been adopted the whole educational system has been unified and strengthened. The barriers between various grades of teachers are being removed. The teaching of all classes of teachers is thereby made more direct, more stimulating and attractive to students. The accrediting system as versus the older, leaves the teacher and the taught free and thereby stimulates to better training. Professor Foster quotes President Harper as opposed to the accrediting system when he left Yale, but later as a firm believer in it as a result of his experience. The professor concludes, "It is perhaps one of the most noteworthy contributions of America to educational progress."

What we do must be done quickly. A national system (meaning thereby governmental co-ordination and possible inspection in harmony with the voluntary co-operation in many western states, concatenating secondary schools, colleges and universities)

PRESIDENT'S ADDRESS

will give modern interstate educational privileges, long needed to keep up with interstate commerce and life, and heightening national ideals and power.

We are thus led to a second question which I attempted to answer in a paper given at the last meeting of the National Association of State Universities.

"Can there be a co-ordination of the examining, certificate, and accrediting (including school inspection) systems for admission to college looking toward a common or national administration in the interests of students, colleges, and the preservation of standards?"

That there can be local co-ordination of the examination, certificate and accredited systems for admission to college is clear, because it is already accomplished in fact. It is true in many institutions. We have an excellent illustration in the report for the year 1904-05 of President Schurman of Cornell. He says: "In the year 1904-05 the number of matriculants presenting certificates in satisfaction of the entrance requirements was 317, and the number of schools they represented was 154. It is sometimes alleged that the scholarship of students admitted on certificate is lower than that of students who are required to pass examinations. But the experience of Cornell University does not support this contention. And consequently the Faculty sees no reason for disturbing an arrangement which, as Dean Crane points out, "is convenient both for the schools and the University." Nevertheless Cornell has from the first co-operated with the College Entrance Examination Board and many of its matriculants enter by the way of that Board's examinations. Thus of 1817 taking the Board's examinations in 1904, not less

AN AMERICAN FEDERATION OF LEARNING

than 251 announced their intention to enter Cornell University. A third avenue to the University is the Regents' diploma for New York state students: and with this credential 238 matriculated in 1904-05. There remains the method of entrance by examinations at the University, which are now given only in September, and of this method 27 availed themselves in 1904-05. The remaining members of the freshman class were admitted on credentials from other universities and colleges, or on Medical Students' Certificates."¹

The Cornell case, showing that there can be a local co-ordination shifts the emphasis of our discussion to the question whether there can be a common or national administration in the interest of students, colleges, and the preserving of standards. That there is a tendency and need and a longing for a common, and indeed a national administration, is evident. The tendency springs from axioms of economic science like that of 'planless production makes waste.' The spirit of this era of co-operation and combination intensifies the longing and the need becomes positive as rapidity of transportation and communication facilitates migration. The unifying of the republic, the emphasizing of American ideals with a deepening consciousness of our world-wide relations, unite the tendency, longing, and need, into an aspiration and positive demand for recognition and development of a national system of education.

This appears in unexpected ways. President Schurman in his report, referring to Mr. Carnegie's

¹ Cornell University, President's Report, 1904-'05, pp. 36-37.

professorial pensions, and Mr. Rockefeller's subsidies for general education in colleges, says:

"Both philanthropists have risen above the idea of a single institution and have grasped the conception of a national system of higher education. And the bounty is as splendid as it is unparalleled in the history of higher education in America. But relatively to the ideal of an efficiently organized system of higher education in the United States, it is only a beginning.¹

President Hadley's last report,² true to the spirit of Yale, breathes with the thought of becoming national. He would gladly appropriate the genius of the state university. He cites Yale's work in forestry as "including the kind of public work which makes the modern university something more than a mere group of schools and elevates it to its highest possible rank — that of a public servant." He dwells upon considerations of public duty as affecting the requirements for admission. He says:

"If the Yale requirements should get so far out of the line of work furnished by the better kind of high schools in the country that we could not expect to get boys from those schools, we should soon become a local institution. Yale would be a school for boys of one kind of antecedents, instead of for boys of all kinds of antecedents; and as soon as it became a school for boys of one kind of antecedents only, it would lose its value as a broadening influence to its students and as a factor in the life of the whole nation.

¹ Ibid. p. 74.

² "Science," Oct. 27, 1905, p. 514 and following.

"Our policy with regard to entrance requirements is thus governed by two separate considerations: our duty to ourselves of not admitting boys except those who are able to do the kind of work which will be required of them, and our duty to the public of admitting all kinds of boys who can do this, on as equal terms as possible. Our student body must be at once hard working and national."¹

He then made this surprising application of this splendid doctrine:

"In order to make ourselves national we admit boys to our undergraduate courses by examination only and not by certificate. We believe that the examination method is fairer to boys who come from distant places. The certificate system is the natural one for the state university, which draws its pupils chiefly from the schools of one locality and can inspect and examine those schools; but if a national university tries to apply this system it gives either an unfair preference to the boys from schools near at hand, or an inadequate test to the boys from remote ones."²

The plausibility of this conclusion disguises the logic of the actual present conditions. As if one institution could become national by refusing recognition to the arrangements of great national groups of secondary schools and colleges like those of the New England College Entrance Certificate Board, and those of the College Entrance Examination Board of the Association of Colleges and Preparatory Schools in the Middle States and Maryland, and the accrediting system of the state and private uni-

¹ Ibid. p. 518.

² "Science," Oct. 27, 1905, p. 519.

PRESIDENT'S REPORT

versities and colleges, particularly as unified through the Commission on Accredited Schools with its board of high school inspectors, in the North Central Association of Colleges and Secondary Schools! How can an institution hope to become national by becoming isolated and local in setting its own examinations? Under this idea confusion becomes worse confounded as institutions multiply with aspirations to be national but insisting upon making their own examinations. What a reversion this is, is evident in the light of the approximation to something national which began to appear through the three or four great provincial organizations just mentioned, covering most of the national territory. By the same token that the certificate system is a natural one for the state university, it would seem to be the one for a national university.

The great state universities draw their students from many states and countries, and have learned by a system of comity that they can safely accept the inspection and accrediting of sister state universities. In fact, with the exception of but three prominent institutions, Harvard, Yale and Princeton, have we not arrived at a practical co-ordination of the examining, certificate, and accrediting systems in that the institutions in the great provincial organizations above referred to, upon occasion accept the testimonials issued by the authorities of any one of these systems? It only remains to see that what the student migrating from one of these great provincial groups to another accomplishes in entering an institution, is safe-guarded from fraud or misinterpretation, and that positively uniform and high standards

AN AMERICAN FEDERATION OF LEARNING

are maintained by the establishment of a proper channel for exchange of documents.

A common administration could be established through a delegacy consisting of secretaries of the existing provincial organizations. Indeed, the College Entrance Examination Board affords a hint as to a way to do it. They provide that representatives of the secondary schools on that board may be appointed by the New England Association of Colleges and Preparatory Schools, the Association of Colleges and Preparatory Schools of the Middle States and of Maryland, the Association of Colleges and Preparatory Schools of the Southern States, and the North Central Association of Colleges and Secondary Schools.

"Each association may appoint one secondary school representative for every three colleges and universities represented in such association and admitted to membership in the board":¹ but under the limitation that the colleges must be admitted by vote of the board to membership, and that the number of secondary schools appointed by any one association shall in no case exceed five.

The scheme of the College Entrance Examination Board strictly interpreted it will be seen, is not automatic; it requires election and is exclusive of anything but the examination system. Let these associations inaugurate a movement by having a conference of representatives from the associations, to which also representatives of Harvard, Yale and Princeton might be asked.

The first step of a common administration, co-

¹ Educational Review, October, 1904, p. 65.

PRESIDENT'S ADDRESS

ordinating the examining, certificate, and accrediting systems seems relatively easy. When we import the term *national* administration in the higher or governmental sense, the difficulties are greatly increased and differences of opinion will multiply. For one, however, I venture to believe that the movements under way will not rest until in some conservative way we have a national attachment — that is, a governmental point of attachment. It must be conceded, in the words of Commissioner Andrew S. Draper upon the legal status of public schools, "that while they are not national, neither are they local institutions — rather are they state institutions."¹ In another place he says: at the close of the Revolution, "It was easily conceived to be a function of government to *encourage* schools."²

"Since the American school system has come to be supported wholly by taxation, it has come to depend upon the exercise of a sovereign power. In the United States the sovereign powers are not all lodged in one place. Such as have not been ceded to the general government are retained by the states. The provision and supervision of schools is one of these. Hence the school system, while marked by many characteristics which are common throughout the country, has a legal organization peculiar to each state."³

Great as are the systems of state schools covering the most of the land and culminating in New York in the most complete state system, unifying the

¹ Proceedings and Transactions, N. E. A., 1889, p. 183.

² Education in the United States, edited by Nicholas Murray Butler, Vol. 1, 1900, p. 5.

³ History of Education in the United States, Dexter, p. 202.

AN AMERICAN FEDERATION OF LEARNING

public and private institutions, they do not satisfy, but on the contrary they feed the hunger for a national system, or better, for a federal co-ordination of the state systems. The state of New York blazes the way for an analogous plan blending the private and state institutions and relating them to the federal government.

An objector will recall the legal status above conceded, and specifically that the Bureau of Education is only advisory, a collector of statistics and an educational clearing house.¹ But as "necessity is the mother of invention," and brought forth after the Civil War with the need of education in the South for the freedman and for the immigrants through the advocacy of a Barnard and a Garfield, in 1867 the Bureau of Education, so again, following the Spanish-American war, necessity for education in our new possessions including Alaska, has tended to a development of the Bureau of Education.²

The committee on resolutions of the National Educational Association, Nicholas Murray Butler, chairman, brought in a report adopted by the Association earnestly urging "upon Congress the wisdom and advisability of reorganizing the Bureau of Education upon broader lines; of erecting it into an independent department on a plane with the Department of Education; and of so constituting the Department of Education that, while its invaluable function of collating and diffusing information be in no wise impaired, it may be equipped to exercise effective oversight of the educational systems of Alaska and of the several islands now dependent upon us, as well

¹ History of Education in the United States, Dexter, p. 202.
² Addresses and Proceedings, N. E. A., 1901, p. 435.

PRESIDENT'S ADDRESS

as to make some provision for the education of the children of the tens of thousands of white people domiciled in the Indian Territory who are without any educational opportunities whatever.

"Such reorganization of the Bureau of Education and such extension of its functions we believe to be demanded by the highest interests of the people of the United States, and we respectfully but earnestly ask the Congress to make provision for such reorganization and extension at its next session. The action so strongly recommended will in no respect contravene the principle that it is one of the recognized functions of the national government to encourage and to aid, but not to control, the educational instrumentalities of the country."¹

Dr. Butler, in an editorial in the Educational Review, 1901, follows up the subject conservatively:

"Questions of erecting the Bureau of Education into an executive department, with a seat in the Cabinet, as was proposed by Senator Hansbrough's bill, introduced into the Fifty-sixth Congress, or of organizing it on the same plane as the Department of Labor, are not necessarily involved, and may wisely be postponed until public opinion on the subject is better informed and more clearly formulated. All immediate necessities could be met by an amendment of existing law that should provide for a bureau of education with two divisions: a division of statistics and reports, to do the work now done by the Bureau; and a division for supervision and administration, to take up the oversight of the school systems of Alaska,

¹ Addresses and Proceedings, N. E. A., 1900, p. 31.

AN AMERICAN FEDERATION OF LEARNING

of the white residents in Indian Territory, of Porto Rico, and of the Philippine Islands."¹

With our eyes opened by *foreign* needs in this era of a new nationalism, would it not be well to turn them upon our greater *domestic* educational needs and the needs of our own white children, for developing the Bureau as shown by the subject we have in hand. Some sense of such needs stirred the National Association of State Universities a year ago to appoint a committee consisting of Presidents Van Hise and Jesse to draft a memorial to enlarge the function of the Bureau of Education.² Without an amendment to the act establishing the Bureau of Education, might it not find authority with comparatively small addition to its expenditures, to act in place of, or in conjunction with, the delegacy above proposed? The law says, it shall "aid the people of the United States in the establishment and maintenance of efficient school systems and otherwise promote the cause of education throughout the country." Let it federate and co-ordinate our present school systems. Let it endorse and promulgate national standards. Local systems and institutions would be free to accept them or not; indeed, national inspectors might complement state and institutional inspectors; the national inspectors visiting upon invitation and without authority, as indeed is the case with the majority of state inspectors. The national inspectors could validate the work of local inspectors for remote parts of the country. The individual colleges would upon occasion, now in this, now in that

¹ Educational Review, Vol. 21, 1901, p. 528.

² Transactions and Proceedings, National Association of State Universities of America, 1904, p. 23.

PRESIDENT'S ADDRESS

subject, be at liberty as they now are even in the most highly developed accrediting systems, to give examinations to an entering student.

In fine, the proposals of this paper apply the doctrine of evolution. We grow from the systems we now have. We correlate them. We leave liberty to each institution and group of institutions to favor the system or lack of system it may have. All that is asked is an open door policy instead of an exclusive one. Ultimately the best system or combination of systems will survive. In the meantime, there will be a germinal genuine American system looking toward a national one in harmony with our new nationalism.

At this point the National Association of State Universities adopted the following resolution and commissioned me to present it to this association with the hope that you would appoint a delegate, and I respectfully recommend that you do so, the other association mentioned in the resolution having already done so.

"RESOLVED, that the Executive Committee of the National Association of State Universities be authorized to seek for the appointment of a joint committee consisting of at least one delegate from each of the following organizations: The New England Association of Colleges and Preparatory Schools; The Association of Colleges and Preparatory Schools of the Middle States and Maryland; The Association of Colleges and Preparatory Schools of the Southern States; The North Central Association of Colleges and Secondary Schools; and The College Entrance Examination Board.

"The said joint committee to present a plan for interrelating the work of these respective organizations in establishing, preserving, and interpreting in com-

AN AMERICAN FEDERATION OF LEARNING

mon terms the standards of admission to college, whatever be the method or combination of methods of admission, in order to accommodate migrating students and to secure just understanding and administration of standards."

Is it too much to see in the conference this resolution calls for the first step toward American Federation of Learning? May we not be near the fulfillment on a national plane of a great movement that has already issued so happily in the federation of colleges and secondary schools within our North Central district?

In 1893, at the Williams College Centennial, filled with the spirit which a little later organized our association, a prophet honored by President Harper as by all of us, Acting President Judson — then Dean Judson — looked forward to the forming of what he called the American Federation of Colleges and Secondary Schools. He indicated the ends to be attained: "*Every* course of study in *every* secondary school shall always lead directly to *some* course of study in *some* college."¹ He asserted that these ends would demand "definite federation among our institutions of higher and secondary learning. This is better than the uniformity of state control because it is free, it is natural, it is in strict accord with the genius of institutions with which we are entirely familiar." "Such a federation should include not colleges alone, not secondary schools alone, but both; and those not in one state or section but in the nation at large. And obviously also such combined action must be initiated by institutions of high rank, capable already of maintaining a good standard of

¹ Williams College Centennial Anniversary, p. 137.

PRESIDENT'S ADDRESS

scholarship. None should be considered which are not able or willing to reach the agreed grade."

The wonderful thing is that Dean Judson venturing to prophecy as to details as well as principles, has proved a true prophet. He says "The federation would provide for adequate supervision and tests of secondary schools to insure the high character of the diploma." He thinks most colleges would sooner or later prefer the diploma plan when sure that the secondary diploma means a definite thing. He perceives also that some colleges would prefer to require examinations and that they would not be debarred from continuing them despite the new plan.

A second great step toward the American Federation of Learning I believe is about to be taken. It is involved in the first step, as again the foresight of Dean Judson beheld. The programme of this session of our association for the third year in succession takes up a discussion as to this step, which I trust may issue in action. Reference is made to requirements for baccalaureate degrees, and the action is the inspection and accrediting of colleges.

Again falling back to Dean Judson: in 1893 he said: "There should be a general unity in the amount and kind of education indicated by the given baccalaureate degree. Many of them are mere flat parchments. In some states there is to-day as much 'wild-catting' in colleges as sixty years ago there was in banking. Every college degree should everywhere be the equivalent of its face value. Should the federation be formed, the degrees of a non-federated college would at once be known as mere 'educational shin plasters'."

At this meeting of the association is not the time

AN AMERICAN FEDERATION OF LEARNING

riple to extend the work of the Commission on Accredited Schools to make a provision for a list of accredited colleges co-ordinate with a list of accredited fitting schools? As our committee on requirements for the bachelor's degree last year reminded us, we have votes of the association which would afford two points of departure: one, that no college in the association shall give the degree of Ph. D. for less than two years of study; and two, that no college in the association shall admit students to the freshman year with less than fifteen units of work in preparation.

It would seem to the Chair that we have the machinery in our present Commission on Accredited Schools and Colleges in the points as to teachers, equipment, etc., in the blanks of our board of inspectors, points which may be paralleled for colleges.

With delicacy, and perhaps with daring, I would indicate a third step toward the American Federation of Learning in setting up standards and accrediting universities as contradistinguished from colleges. The powerful development of germinal and real universities since the founding of this association would call for an expansion of its title to be The North Central Association of Universities, Colleges, and Secondary Schools. The inchoate classification exists by the highest test in a commercial age — that of the purse — in that our membership annual fee is ten dollars for each university, as over against five dollars for each college. Universities are mentioned in the article for membership as if they were a link between colleges and secondary schools, the reading being, "Colleges and Universities and Secondary Schools." This may be a good omen, as the univer-

PRESIDENT'S ADDRESS

sity stands for the highest education as contradistinguished from the higher, of the college. The university has the college on the one hand, and the secondary schools on the other. In our present membership of sixty-six secondary institutions and of thirty-four higher institutions, nineteen are called universities, seven of them among the largest and strongest, private, and twelve, state. With such an apparent fortunate balance it would seem to be a favorable moment for the adjustments and accrediting of the three kinds of institutions.

The Association of American Universities, consisting of fourteen institutions, irreverently called the "Ph. D. Trust," may, possibly be the forerunner of something more thoroughly American. It will primarily set up standards by adhering to which institutions may become members instead of beginning with election, and seeming no doubt somewhat unjustly exclusive. In any case, in our happy North Central family let us set up university, as well as college and secondary school standards. Facetous though it may seem, in seriousness we may see in the standards in athletics set up by our Association, and administered by the "Big Nine" Conference of institutions among us, and beginning to be recognized in the east, an advance toward the Federation of Learning.

The next advance toward an American Federation of Learning is being crowded upon us by the various national associations of professional colleges like those of medicine, law, dentistry, and pharmacy. These associations decidedly mark progress. They, however, and the educational institutions we represent would greatly benefit by federation. They are

AN AMERICAN FEDERATION OF LEARNING

more beset than are we with the temptations of an age of commercialism. The more or less false distinctions between practical and theoretical, between the supposed interest of mere practitioners, as contradistinguished from professional schools, may hamper them. The ancient and honorable professions must be reckoned with, and are in a position of less open responsibility to the public. Of necessity, in the interests of the people legislation must be more quickly precipitated in these fields than in the purely educational. By all these tokens, it is so much the more imperative that there should be as speedily as possible an American Federation of Learning at least by conference and correspondence upon the part of the great educational and professional associations.

Yet again, the affiliation of the highest national institutions like the Smithsonian and the Carnegie Institution, and the numberless learned societies and local academies and museums with our established educational institutions should be accomplished and have some representation in associations like this.

Dimly in the more remote future may not one foresee a confederation of the American Federation of Learning with that of Labor. In labor's world-wide competition it must have not only unions and federations of them, not only industrial education, but also commercial, social, and intellectual. Even the classic must be linked with the technic. The cultured, christianized capitalist and the educated workman must be at one, going out from the same school. It is significant that our association includes technical colleges and manual training schools.

The broad scope we have given to our subject may

PRESIDENT'S ADDRESS

cause someone to query if we are not trenching upon the field of the National Educational Association, and in particular upon that of the National Council of Education. We think not. That association as the preamble of its constitution indicates, is primarily for teachers, to "advance the interests of the profession of teaching." The object of the Council is primarily "to reach and disseminate correct thinking on educational questions." Its sphere, invaluable in its place, has proved to be that of thought, not of action. The National Educational Association of necessity is a great mass meeting, and carries out admirably Horace Mann's valuable idea of education by convention. Its departments represent the crystallization of interests along horizontal lines. It tends toward a stratification of education and thought. This North Central Association, on the contrary, has perpendicular lines. It therefore coordinates; it stands for action, integrating the highest with the lowest and permeating the whole field of education and life. The American Federation of Learning of which we dream will therefore be along the lines of this, and its great sister provincial associations. With so vast a country, to represent local necessities and freedom, and for purposes of administration, can we do better than to recognize the political unities of states as fundamental, but with these unities in groups of provinces like our North Central, according to the great natural divisions of the country, as the national Bureau of Education has indicated them.

In this no longer the mid-west, but the magnificent mid-lands of our nation, solemnized by our opportunities and responsibilities, with renewed zeal

AN AMERICAN FEDERATION OF LEARNING

and with the prophetic vision as broad as that of humanity, let us continue by deeds more than by words to promote an American Federation of Learning.

The report of the Treasurer, Principal J. E. Armstrong, Englewood High School, Chicago, was presented as follows:

REPORT OF THE TREASURER OF THE ASSOCIATION FOR THE YEAR ENDING MARCH 23, 1906.

RECEIPTS.

Cash on hand at date of last report.....	\$118 10
From the sale of reports and blanks.....	22 70
From sixty-four \$3 memberships.....	192 00
From twelve \$5 memberships.....	60 00
From twenty-one \$10 memberships.....	210 00
Total	\$602 80

DISBURSEMENTS.

Postage	\$5 50
Express	1 33
Exchange on checks.....	85
Stenographer	8 00
Expenses of committees.....	210 04
Printing	231 58
Total	\$457 30

Cash on hand..... \$145 50 \$602 80

J. E. ARMSTRONG,
Treasurer.

Mar. 23, 1906.

The Executive Committee recommended the following institutions and individuals for membership in the Association:

FOR INSTITUTIONAL MEMBERS.

University of Notre Dame, Notre Dame, Indiana. The Rev.
John Cavanaugh, D. D., President.
Washburn College, Topeka, Kansas, Norman Plass, President.
Rockford College, Rockford, Illinois, Julia Gulliver, President.

Drake University, Des Moines, Iowa, H. M. Bell, President.
Olivet College, Olivet, Michigan, E. G. Lancaster, President.
The Miss Wolcott School, Denver, Colorado.
The High School of the University of Chicago, W. B. Owen,
Principal.
Council Bluffs (Iowa) High School, S. L. Thomas, Principal.
Dubuque (Iowa) High School, Frank L. Smart, Principal.
West High School, Des Moines, Iowa, W. A. Crusinberry, Principal.
Sterling Township High School, Sterling, Illinois, E. T. Austin,
Principal.
South Division High School, Milwaukee, Wisconsin, Edw. Rissman,
Principal.
Wayland Academy, Beaver Dam, Wisconsin, E. P. Brown, Principal.
Michigan Seminary, Kalamazoo, Dr. Gray, President.
Charlotte (Michigan) High School, M. R. Parmelee, Superin-
tendent.
Glenville High School, Cleveland, Ohio, H. S. Cully, Principal.
Central High School, Columbus, Ohio, W. M. Townsend, Principal.
South High School, Columbus, Ohio, C. S. Barrett, Principal.

FOR INDIVIDUAL MEMBERS.

F. C. Ensign, High School Inspector, The State University of Iowa.
President Charles E. Shelton, Simpson College, Indianola, Iowa.
E. O. Holland, High School Inspector, University of Indiana.
H. L. Terry, State High School Inspector, Wisconsin.
F. J. Miller, High School Inspector, The University of Chicago.
T. Morey Hodgman, High School Inspector, University of Nebraska.
Frederick C. Hicks, Professor in the University of Cincinnati.
W. H. Johnson, High School Inspector, University of Kansas.
M. M. Ramer, Superintendent of Public Instruction, South Dakota.
Nathaniel Butler, Professor in the University of Chicago.
Thomas Arkle Clark, Dean of Undergraduates, The University of
Illinois.
Wilbur O. Carrier, President of Carroll College, Waukesha, Wis.

On motion the recommendations of the committee
were adopted and the institutions and individuals
named above were elected to membership in the As-
sociation.

The report of the Committee on Athletics was in-
troduced by the Chairman of the Committee, Princi-
pal E. L. Harris of the Central High School, Cleve-
land, Ohio, as follows:

To the Members of the North Central Association of Colleges and Secondary Schools:

In accordance with the resolution presented by Dean Woodward, last year, that the Athletic Committee be authorized to have the new rules printed and distributed, the Committee prepared the circulars covering the regulations as printed in the Proceedings for April, 1905. The following request accompanied the distribution of these circulars: "Will you bring these rules before your faculty or governing body; will you kindly report the action of said body to the member of the Committee designated to attend to the correspondence from your state, noting at what time you can put the rules into effect if adopted?" A sufficient number of these circulars were sent to the Secretary of the Association for the institutional members; two hundred were sent to each member of the Committee — to be distributed among schools not members, that is, for missionary work. Very few answers were received by the Committee, but nevertheless the results have been very gratifying. For example, the colleges of Ohio, the Big Six, have practically adopted these rules; the secondary schools of the state have also adopted them. In one city, Cleveland, the Board of Education has approved the rules, making them practically obligatory. Favorable reports of the good work among the secondary schools of other states have been received.

I have asked Professor Waldo to present the report of the college section of the Committee.

Professor Clarence A. Waldo, of Purdue University, then presented the report as follows:

REPORT OF THE COLLEGE SECTION OF THE ATHLETIC COMMITTEE.

Twice a year or oftener the faculty representatives of the Nine Chicago Conference Institutions meet in Chicago to legislate on athletic matters. Their action, however, is not final until it has been ratified by the allied institutions. Objections to be effective must be filed with the Secretary of the meeting within sixty days from the time of receiving his official report. Any institution not heard from before the expiration of the allotted time is counted as voting in the affirmative; a unanimous vote makes the proposition at once Conference law. If any objection has been made, the action is reviewed at a subsequent called or regular meeting of the Conference. If it is once more adopted by a majority of the Conference it goes back again to the faculties of the institutions when a two-thirds affirmative vote is the minimum required to make it law.

When a regulation has been thus adopted any Conference institution is in honor bound to enforce it strictly or withdraw from the Conference. This is stated in order that what follows may be clearly understood.

Subsequent to the athletic season of the Fall of 1905 the long gathering storm of popular disapproval broke about the game of football. Early in January, President Angell of Ann Arbor, very properly took the initiative and called a meeting of faculty representatives of the Conference Colleges, which convened in Chicago, January 19, 1906. Professor Pattengill opened the meeting by reading the following letter from President Angell.

"Gentlemen of the Conference:

Since, on the suggestion of some of the universities here represented, I have invited you to meet here in conference, I trust it will not be deemed presumptuous in me to call attention briefly to some of the points which will claim your consideration.

I presume that all of you, like me, have looked with favor on the introduction of athletic games, including foot-ball, into our universities. In many respects they have been of great service. But I presume also that in the opinion of us all the present relation of our game of foot-ball is not what we desire.

The general complaint in the public press is of the roughness and dangerous character of the game. Now, while it is desirable, and I hope practicable, to remove some of the objection to the present style of playing, I think that we who administer universities will agree that there are other objections to the present mode of carrying on the game quite as serious as the roughness in the play. Let us notice some of them.

1. Under the actual organization the absorbing interest and excitement of the students—not to speak of the public—in the preparation for the intercollegiate games make a damaging invasion into the proper work of the university for the first ten or twelve weeks of the academic year. This is true not of the players alone, but of the main body of students, who think and talk of little else but the game. The season given up to this excitement is too long. The games are too many. The number should be reduced. It is a fair question whether without resorting to intercollegiate games the competition of classes and departments in any university would not furnish

games enough for healthy rivalry. It would probably spare us the presence of thousands of spectators from outside.

2. The present conditions constantly hold before the students and before the world false ideals of college life. Not only in the college journals, but in the newspaper press of the whole country the students who by daily descriptions and by portraits are held up as the great men of the university are the men of brawn rather than the men of brains. Their slight ailments are chronicled with as much promptness as are those of a King in his Court Gazette. Their names are daily carried by the Associated Press from ocean to ocean. Not only undergraduates but school boys are filled with aspirations to follow in the footsteps, not of the best scholars, but of the best players.

3. The university is necessarily viewed in a wrong perspective. It is looked on as training men for a public spectacle, to which people come by thousands, instead of quietly training men for useful, intellectual, and moral service while securing ample opportunity for reasonable athletic sports. Indeed the intellectual trainers are made to appear as of small consequence compared with the football coach trainer.

4. The expenditure of money in the preparation for the game is out of all proportion to what a rational provision for exercise and games for students ought to call for. I need not go into details. I will only add that where so much money is handled for such purpose, the temptations to misuse are not wanting.

To preserve what is good in the game and to rem-

edy all the incidental evils which have gathered about it may not be easy. But I trust that this Conference will enter upon the task courageously and reach some helpful conclusion to take back to the nine universities represented. I believe your Faculties are ready to support you in any wise measures which are calculated to diminish the evils complained of, or still better to cure them altogether."

A Committee consisting of Professors M. W. Sampson of Indiana University, F. J. Turner of the University of Wisconsin, T. F. Moran of Purdue University appointed to make a statement of the evils of the present situation reported as follows:

"The Conference called to consider the inter-collegiate game of football and its relations to college life, finds in the general situation a condition of affairs that imperatively demands a change. It is not to our minds a question between modifying the game or leaving it alone; it is a choice between suspending the game as an inter-collegiate sport, or cutting away its evils.

These evils we find to be many, some of them open, some hidden from the general knowledge, and most of them difficult to deal with save by radical reformation. The evils fall into two general classes: those inherent in the playing rules of the game as it stands at present,—the evils of physical danger and of brutality,—and the moral evils attending upon the gradual raising of the game into a thing of absorbing and sometimes hysterical public and collegiate interest. Whether the game itself has called these latter evils into existence, or whether the swerving aside from the standards of true sport has en-

dangered and brutalized the game, is not now the important matter. The main fact is that the game itself must be reformed as a game, the far more serious degeneration in athletic standards must be checked, and a healthy condition restored.

Such a healthy condition exists we believe, not in the severe practice and playing of a very few experts, but in the general and active participation in wholesome outdoor exercise by practically the whole student body. The present system fails to supply the natural need of general exercise and substitutes for it a mere show or athletic exhibition of trained performers for the pleasure of spectators, who themselves receive no athletic benefit.

At the bottom of all the difficulties is the misapprehension, obvious in college communities, but no less wide-spread in the general public, of the relation that a form of physical exercise bears to the educational life of an institution of the higher learning. Football has been shifted from its position as an admirable, wholesome outlet of vigorous physical activities, and has been made to offer opportunity for the manifestation of many extreme, nervous and illogical tendencies of modern college life. To be specific, the following harmful conditions are noted:

The large number of games played and the length of the season as a whole, are detrimental. The interest of a college, of a whole town, and indeed to some extent, of the entire public is held for a long time at more or less high tension, to the exclusion of far more important interests; and the consequences of the prolonged strain are marked in the physical and mental condition of the members of the

team, and in the scholarly efficiency of the students in general.

This heightened excitement, occasionally artificially kept up by various devices for arousing "enthusiasm," involves unreal ideals of university manhood, exaltation of the athlete above the student, bitter rivalry with friendly institutions, unfair judgments of these institutions, suspicions of underhand treatment, and the employment of methods either illegal or barely within the letter of the law,—the result being to create a feeling that the main matter of importance in the autumn semester is to turn out, at all hazards, a winning football team.

Professional coaching constitutes another one of the abnormal conditions of the situation. While much good has resulted from the instruction given by expert athletes of high, sportsmanlike ideals, nevertheless the present pressure upon a coach to develop a winning team or to lose prestige, perhaps to lose his position, is an incessant temptation to secure players in all sorts of ways, and to instruct them to utilize in playing, various means to defeat the spirit of the rules of the game.

Along with this is the zeal of many alumni, who, loyal in intention, but yet unguardful of the real honor and good name of their Alma Mater, raise or contribute money to pay the expenses of athletes in college, thus professionalizing them and corrupting the student sentiment.

Obviously wrong, are the recruiting of students by coaches, managers, alumni and others, for essentially athletic purposes, the excess of severe and prolonged training, the moral evils frequently following the abrupt breaking of training at the end of the

season, the hardship upon students, who are called to give undue time and money to intercollegiate games, the notion that a championship must be contended for, the too great publicity given to minor details of practice, and the like, the adoption by the high schools of distorted notions of college ideas and college customs, and the excesses — such as betting — attendant upon all contests, that are especially pronounced when the public is as great as it is in football.

The Conference therefore desires to eliminate from the general conduct of the game certain wholly unnecessary evils — extravagances in salaries and the purchase of supplies, the over-long season, the too frequent games, the centering of the interest in the team as distinguished from the general participation of students in athletics, and the wholly false emphasis that is laid upon what cannot be regarded as anything other than an incident in college life."

After careful consideration and much discussion the Conference finally sent a series of recommendations with a unanimous vote to the Conference institutions for action by the several governing bodies:

Seven of the nine institutions adopted these recommendations without essential modifications, two of them, however, Chicago and Wisconsin expressing a preference for the unconditional abolition of football for two years. The remaining two institutions, Indiana and Michigan specially objected to the abolition of the independent high-priced professional coach. Michigan, especially, found that her contracts made it necessary for her to persist in her objection even if in so doing she might be compelled to

withdraw from the Conference in which for so long a time she had been a leading and influential member.

The second Conference called by President Angell and made necessary by the objections mentioned, convened March 9, 1906 and was in session two days.

At the second meeting there were few propositions to consider — the question of the professional coach occupying most of the time. The final form of the new legislation proposed by the two Conferences and unanimously adopted by the nine institutions is as follows; — with the one exception noted all are effective September 1, 1906: —

1. "That no student shall participate in intercollegiate athletics until he shall have been in residence one year and shall have completed one full year of work, in addition to meeting the entrance requirements of the college of Liberal Arts of his institution, or its equivalent."

2a. "That no student shall participate in intercollegiate athletics for more than three years in the aggregate."

2b. "And that participation be confined to students who have not graduated from any department of a college or university."

(a) To be effective September 1st, 1906, except for students who participated in intercollegiate athletics in the academic year, 1905-1906; for these it shall be effective December 1st, 1906.

3. "No foot-ball team consisting in whole or part of college students shall play with high schools, academies, or independent professional schools."

4. "That not more than five games of intercolle-

giate foot-ball shall be played by any team in any season."

5. "That the regular Conference rescind its present rule which does not count as participation the first three games of foot-ball in each season."*

6. "That freshman foot-ball teams and second elevens play only with teams from their own institutions."

7. "That the price for admission to intercollegiate contests for members of the University be not more than 50 cents including reserved seats."

8. "That there shall be no training table or training quarters for any athletic team."

9. "That the competent University officer state in his certificate of eligibility,

a. That the student has passed all entrance requirements.

b. That he has passed all intervening work as regularly required in his University for the period involved.

c. That he is taking full work in the present semester."

10. "That no coach be appointed except by University governing bodies on the recommendation of the Faculty, or President, in the regular way, and at a moderate salary. This recommendation to become operative as soon as existing contracts in the several institutions permit."

11. "That there be no preliminary training prior to the beginning of instruction."

12. "That the foot-ball season end the Saturday before Thanksgiving."

* The regular Conference recommended that this rule be rescinded at its session on March 10, 1906.

13. "That steps be taken to reduce the receipts and expenses of athletic contests."

14. "That the athletic surplus be devoted as far as possible to permanent University improvements and that the financial management of athletics be entirely within the control of the Faculty which shall publish a report of the receipts and expenses."

Further it was adopted:

A. That the Conference recommends that the game of football as played at present be abolished as an intercollegiate and collegiate sport in the Conference colleges.

B. That the Conference awaits from the Rules Committee such modification of the playing rules as will free the game from brutality and unnecessary danger.

C. That in the event of such alteration not being sufficient the Conference will delegate a committee of its own to draw up rules.

D. That if a satisfactory game can thus be established the restrictions recommended by the Conference shall apply to its conduct and management.

This record should not be closed without some mention of Prof. A. H. Pattengill who in 1898 succeeded Prof. J. H. Knowlton as Michigan's representative in the various Conferences and who suddenly passed away the 16th of this month to the great sorrow of all who knew him. As a young man Prof. Pattengill was a notable athlete and all through life he retained an ardent love for young men and sympathy with them. His observation was keen, his counsels wise, his hand firm; and in the steady progress in athletic affairs here in the Middle West he has held a commanding position. We may rest as-

same honor. Provide ample outdoor and indoor facilities for all your students to run and jump and throw the weights; to play football, baseball, basketball, lacrosse, hockey, golf, tennis; to swing on the rings, climb the ladders, circle the bars and tumble on the mats; in short to make the brain clear, the heart strong, the nerve steady; but no longer be a party to a transaction which allows one man to take possession of your students, train them as gladiators, to enter them at the risk of life and limb in a great spectacular contest, for what? Chiefly for his own glory and gain?

With reference to the game of football itself the two Angell Conferences took strong ground.

Does the interest in football depend in any large measure upon the ever present expectation that in every scrimmage some one will be hurt? If it does, it brutalizes the spectators. If it does not, then what is the use of playing the game that way? Without protective armor every member of any recent team would have been at times on the hospital list. And yet football that is attractive to both player and spectator does not require such clumsy, unsanitary accoutrements. Last fall one Rugby fixture in England drew, according to report, an audience of eighty thousand. Look in some of our leading magazines during or immediately following the last football season and note a series of illustrations which show the contrast between the ugly, awkward armor of American football and the light, free and graceful uniforms that serve for Rugby football.

If we can agree upon nothing else that is sensible let us adopt straight out the present English Rugby game, or the Association game, for our colleges and

secondary schools. If these games then need further development to adapt them to Americans, let us proceed along sane lines.

Recently news came from Michigan that the presidents of the colleges which compose a minor Association in that state, would allow students to participate in intercollegiate base ball who had received money for playing on summer teams. In other words these presidents have legalized professionalism in one branch of college sport. Do these honored educators believe that men who play base ball for money will not also under such circumstances be for hire in the colleges themselves? And do they believe that star players will not soon go to those colleges bidding highest for their services? And the teams like running horses will give a fine basis for gambling! Follow that thing through in all its ramifications and see where it lands you. Our splendid American game of base ball has been sinking lower and lower in public esteem. Our strong-hearted, moral and religious element no longer support it, and the league contests are taking on more or less of a hoodlum character. Now that professional base ball is in a well recognized moral decline shall we arrange conditions about our colleges so that our students shall hobnob with drifting, illiterate, professional base ball players or become useless professionals themselves? Which under such conditions is more likely, that the students will elevate the game or that the game will degrade the students? Profession base ball has no place on the college campus; Brown University not long ago proved that to her satisfaction. Owing to the difficulties of the base ball situation, a movement has gained considerable strength to do in our

leading Conference precisely what the Michigan presidents have done. Should the Chicago Conference in an unfortunate moment vote to remove amateur restrictions from college base ball, there is certainly only one thing for an institution to do that sees with level eye and that is to abolish base ball altogether as an intercollegiate sport and refuse to allow any team to represent it in the field until better times should come again.

Chicago Conference territory as is well-known embraces the states of Michigan, Wisconsin, Minnesota, Iowa, Illinois and Indiana. Besides these Ohio is well organized in a Conference of its own and is working out results as thorough and desirable as the older and larger organization.

In Missouri the State University and Washington University have taken the lead in an admirable way, have organized college and secondary school sentiment and have joined with the universities of Kansas and Nebraska in an agreement to support the best ideals in sport.

At present, however, the Chicago Conference takes the lead in our athletic affairs.

In conclusion we wish to put five resolutions on their passage.

1. *Resolved*, That as far as we are able we will secure in the institutions which we here represent the adoption of the recommendations of the two recent Angell Conferences.

2. *Resolved*, That we reaffirm the fact that we will do what we can to hasten the disappearance of the irresponsible professional coach, football, baseball and coaches of other branches of athletics.

3. *Resolved*, That we will maintain strictly amateur baseball teams or abolish the game altogether as a branch of intercollegiate sport.

4. *Resolved*, That this Association recommends to the colleges here represented that for the year 1906 they adopt the rules for playing the game soon to be promulgated by the so-called Chicago Conference.

In many institutions the character and ideals of the manager of athletics have been a source of much difficulty to those who have striven steadily for the best.

The manager is in a position to nullify what he does not wish carried into effect; if he openly or secretly belongs to the forces of corruption he can act as a connecting link between the buyer and seller, at the same time thoroughly covering his own actions. The Committee thinks it important that the attention of the Association be more emphatically directed towards this man whose influence for good or evil is so great, and would suggest to the Association the necessity of a wise choice on the part of college authorities. If he is to be a student as is of necessity often the case, it is thought that the fifth resolution here appended may help to clear the situation.

5. *Resolved*, That the athletic manager, if a student, should be chosen only from among those students who completely fulfill all the eligibility requirements which our rules exact from members of our intercollegiate and interscholastic teams.

EDWARD L. HARRIS,
Central High School, Cleveland, O.

C. A. WALDO,
Purdue University, Lafayette, Ind.

A. A. STAGG,
University of Chicago, Chicago, Ill.

C. M. WOODWARD,
Washington University, St. Louis, Mo.

J. E. ARMSTRONG,
Englewood High School, Chicago, Ill.

W. J. S. BRYAN,
Central High School, St. Louis, Mo.

It was moved by President Kirk that the report be adopted.

It was moved in amendment by Chancellor Chaplin, that the fourth resolution be referred back to the committee with the request that the committee keep the members of the Association informed of all actions adopted in the premises by the "Big Nine." The motion in amendment was adopted and the report as thus amended on motion was adopted.

On further motion the Committee was requested to express to the Association as soon as possible its recommendations concerning the new rules and its opinion concerning their character and desirability.

On motion it was ordered that the report of the Committee on Athletics be printed and distributed in pamphlet form at an early date.

The following report was presented by Principal E. L. Harris, delegate to the College Entrance Examination Board:

REPORT OF DELEGATE TO COLLEGE EXAMINATION BOARD.

Mr. President and Members:

I attended the meeting of the College Board last spring, following our last annual meeting. The work done was of a technical character in preparation for the coming examinations. A proposition was presented to the Board to join the work with the N. Y. State Regents, but the plan was finally rejected. I placed your resolution, in reference to the new English Requirements, before the Board. A Committee was appointed, consisting of President Thomas, Presi-

dent Thwing and Professor Wilson Farrand, to report on the request at the next meeting.

I was called again to the fall meeting of the Board and twice this winter, but I was unable to attend, and was excused by the Board. The following report of the action of the Committee and of the Board was sent to me.

"Your Committee unanimously submits the following report: Whereas the legitimate function of the College Entrance Examination Board as such is not to frame entrance requirements on the various college preparatory subjects, but to set papers and conduct examinations in accordance with the entrance requirements recommended for adoption in each subject by authoritative organizations of specialists; and whereas the Conference on Uniform Entrance Requirements in English announced three years ago the English Requirements for 1906-'07-'08, which have since been adopted by the greater number if not by all of the colleges belonging to the Board, your committee deems it inexpedient and opposed to the precedent set by the Board to grant the request of the North-Central Association of Colleges and Preparatory Schools to proceed immediately to set the examination papers on the requirements adopted by the Conference on Uniform Entrance Requirements in English for the years 1909-'10-'11, and your Committee therefore recommends that the request of the North Central Association of Colleges and Preparatory Schools be refused."

On motion the report was accepted.

The President then announced the following committees:

To audit the Treasurer's report: Professor Marshall S. Snow, Washington University; President John R. Kirk, State Normal School, Kirksville, Missouri; Principal George W. Benton, Shortridge High School, Indianapolis, Ind.

To recommend time and place of the next annual meeting: President Henry C. King, Oberlin College; Superintendent A. F. Nightingale, Chicago, Hon. Geo. B. Aiton, State Inspector, Minneapolis.

To nominate officers for the ensuing year: Professor F. N. Scott, University of Michigan; Principal Frederick L. Bliss, Detroit University School; President Homer L. Seerley, State Normal School, Cedar Falls, Iowa; Director George N. Carman, Lewis Institute, Chicago; President James H. Baker, University of Colorado.

The following paper was then presented by Principal George W. Benton, of the Shortridge High School, Indianapolis, Ind.

SINCE HIGH SCHOOLS ARE COSTING SO
MUCH WHAT CAN COLLEGES DO TO
ASSIST THEM IN MEETING THE
DEMANDS OF THE PUBLIC?

PRINCIPAL GEORGE W. BENTON, SHORTRIDGE HIGH
SCHOOL, INDIANAPOLIS, IND.

More than sixteen years ago President Eliot said, "The secondary school, taken as a whole, does not exist for the purpose of preparing boys and girls for college. Its main function is to prepare for the duties of life that small proportion of the children in the country, (a proportion small in number, but very important to the welfare of the nation) who show themselves able to profit by an education prolonged to eighteen years, and whose parents are able to support them while they remain so long at school." If we have since modified the statement of the case, the idea given by President Eliot has undoubtedly remained practically unchanged.

With this view of the purpose of the secondary

school, it becomes at once a question of the needs of the community in which the school exists. That secondary school which, in a community of wealth, has for its main business the preparation of boys and girls for classical colleges, has quite a different purpose from that of the school which exists in a community where the utility of the preparation is measured by its income-producing power. The character of the school must meet the needs of the local community. If five per cent of the total enrollment of the school are going to college, and the college preparation must be given at the expense of the time and energies of teachers which should be given to the ninety-five per cent for whom other preparation is desired, it is very evident that the public will demand an accounting, and insist upon a modification of the course of study, and the habits of instruction which the school affects. It makes no difference in the relations of the school to the public whether the public demand is approximately in accordance with the highest ideals of the educational theorist; the fact remains that the public high school is an institution of the people, created for their benefit and intended to carry out their desires. Should the direct aims of the public not be the aims of educational people, the duty of the school is still to the public, and while the school is meeting the demands of the public, it must strive to mould public opinion as nearly as possible to an approximation of what the school should be.

For the purpose of this article, the community may be divided educationally into three classes. Those who oppose secondary education at public expense; those who are enthusiastically in sympathy

with it, and those who are entirely indifferent, or, at least, are inactive, neither for nor against the school. Fortunately for education, the first class is comparatively small where the school is doing creditable work. Its influence is usually far-reaching, however, because the representatives of this class are frequently able to touch the people upon one point that is always vulnerable — that of taxation. This class also usually has the use of the columns of the daily press where articles of a character likely to be injurious to the progress of high ideals in general education can be exploited. This class of obstructionists also usually includes the unfortunate wealthy who are childless, or who have the aristocratic aim of the private school to foster. As a natural consequence, what this class lacks in number it makes up in influence.

Here, obstruction is the result, regardless of the often-expressed admission that the schools are doing a great work in the community, the claim being that this work is done at a cost that is incommensurate. The second class is made up of a large body of intelligent citizens who themselves have had the advantages of secondary education at public expense, whose children are now enjoying its benefits, and who have the definite knowledge that the education offered in the public school is far beyond that which the individuals themselves would be able to compass with private means. They further realize that whatever the expense is or may be, the educational product, as expressed in high quality of citizenship, is an investment which is indispensable to the state. The third class is composed of those indifferent people found in every community in entirely too large numbers,

who do not interest themselves in public school affairs, who sometimes send their children to school to get them out of the way, and, who, because some children fail in life, are ready to charge the school with their failure. This class is always ready to cheer the pessimistic utterances of the enemies of public education, and to cry that the public is taxed without value received.

The real occasion of anxiety for the future of the secondary school is not to be looked for on the general ground of the utility of the school, but from a consideration of its enormous and rapid growth. The development of the common schools, while extensive, has been more gradual. There is no opposition to this, even from the enemies of the high school, provided the increase in the available cash keeps pace with the development of the schools. But the case of the high school is different. In some cities within the same time that the population has doubled, the attendance upon high schools has quadrupled; and, whereas, high school teachers could be engaged readily a few years ago, at anywhere from \$700 to \$1,200, to-day these figures do not begin to express the expense. Again, intelligent men have been heard to say that high school teachers ought not to receive any more pay than grade school teachers, in spite of the fact that the demands made of high school teachers in preparation and living, are greatly in excess of demands on grade teachers. Again, the grade teacher in most cities is expected to handle forty to fifty pupils at the same time that the high school teacher handles twenty-five or thirty. More than this, the cost of equipment for the handling of secondary subjects is frequently large. As a consequence the rapid

increase in the attendance upon the high school, and the greater per capita cost of instruction, not only in respect to the expense for teachers, but for equipment and even for buildings, are just now in many cities bringing secondary schools sharply up before the people for serious consideration.

The people are asking, "are the needs of our children being met by this expensive institution: are the demands of college entrance requirements, which are largely influencing the course of study in most schools, interfering with the proper training of our children in the other lines of work which, in our opinion, they should have?" In many schools which have a portion of their subjects required, and offer electives as a part of the requirement for graduation, some parents have discovered that at the end of the four years' course, even when the work has been well done, the character and variety of the work are not such as to meet the requirements of some college upon which they have decided for their child. It does not matter that the work done is of a high character; that the training received, although along a different line from that prescribed by the institution in question, has been thorough, and that it has developed in the child a power to think and to do, which renders him able to take his place among his fellows. These parents are asking what should be a standard of fitness for entrance to college. Is it specific preparation in certain grooves? Why should it not be a question of capacity? They look over the catalogues of the colleges and, unless the principal is exceedingly tactful, they will discover that the committee of this association appointed to consider requirements for the bachelor's degree, was justified in assuming that

the work of the commission on accrediting schools might well include the work of accrediting colleges. This committee found, as they stated in their report, that in attempting to unify the various systems of units, tabulation involved great difficulties; that many catalogues are vague or indefinite in the statement of requirements, and in some cases decidedly inconsistent. A reference to the tabulation given on pages 38 to 46 of the report of the tenth meeting of this association will show that there is an amazing diversity of requirements. Any one who undertakes to tabulate these study schemes for himself, as I have done, will have this forced upon him in no uncertain way. The duty of the school to the parent in question cannot be ignored, for is the school not his school? And has he not the right to expect that four years work shall produce results in his children which have been produced in the children of others?

One has only to go through the volumes of the National Educational Association reports from 1890 to the present time to realize that decided improvement has been made along this line. There are certain definite things which all colleges require and which all schools might well require as a basis for graduation. There certainly can be no objection to requiring three years of English, two and one half years of mathematics, one year of history, one year of science, and three or four years of a language other than English. Colleges generally require these and more. A college president, discussing an article on universities and schools, by Superintendent Cooper, in the N. E. A. report of 1891, deplored the number of subjects already in the high school which were not needed for college preparation. He thought that the

the for the education of the child would be greatly increased by increasing the college course but it is decreasing its preparation. The inference is that at least then the college requirements were not as high as now. But it is only necessary to consider the present requirements of a few of the leading colleges of the country to discover that the boy or girl who expects to enter college unconditioned cannot deviate from a fixed line of work covering four subjects each year for the four years; and that none of these pupils unless they be unusually strong physically and mentally, will have time to do anything else. Mr. Wilson Farrand, of the Newark Academy, has a note in the January issue of the Educational Review for the reduction of the present college entrance requirements. His claim and his claim is certainly justified that a boy or girl to meet a sixteen point requirement must have twenty recreations per week for the entire four years, and that this does not include such subjects as music, drawing, elevation, manual training and other important topics among which could be mentioned certain commercial subjects. Comparing his statement with the statement of the college president in 1891, it will be seen that the colleges are crowding the preparatory work in such a way as to threaten a deterioration of its quality, and at the same time to preclude the possibility of touching certain phases of education which many persons rightfully believe have an important work in development. Mr. Farrand further notes that not only does the entrance requirement demand the student's full time for four years, but that the very nature of the requirement makes it practically impossible to do one-fourth of it in the first of those four years. Some of the col-

leges insist that the final examinations upon which the school is authorized to certify its pupils shall be given within two years of entrance to college. Certainly such a subject as ancient history can be handled by first year students with difficulty, if at all, to the satisfaction of the college. As a consequence much of their work must be reviewed in the last two years of the course, and the school may rightfully be charged with overdoing its work, and forcing its pupils beyond their strength.

"Forty years ago," says Mr. Farrand, "the requirements at Yale amounted to just nine points; to-day they are practically doubled, and what is true of Yale is true of the country at large." I should not advocate a return to the nine point requirement referred to, but I cannot help being impressed with the fact that a marked improvement in the quality of the work of the secondary schools has produced a preparation far in excess of that which the colleges ought to demand along fixed lines. Time should be available in the life of the secondary student for certain so-called practical subjects which will influence his preparation as a social being, whether he is to go to college or not, and particularly if he is to go to college. He should be familiar with the elements of commercial law which, too frequently, is a closed book to those who consider themselves educated. He ought to have time for some elementary studies in sociology, studies which might possibly improve upon his tendency to make class scraps and pipe dreams the business of his college course. Professor Nathaniel Butler, of Chicago University, in an article in the February number of the School Review, compares in a very interesting way, the special prep-

aration for life's vocation with the development of a many-sided interest. He has summed up the whole problem, it seems to me, in a very clear way in a single paragraph which I quote. "We have, I believe, found out another thing: that while the two, the establishment of a many-sided interest, and preparation for vocation are indispensable parts of education, and never absolutely separable, the emphasis shifts from stage to stage of the educational process; and that the thing of chief importance in adolescence is a setting up of the many-sided interest, not in opposition to special preparation, but as an indispensable pre-requisite to special preparation." He further touches upon the use of two words—"culture" and "education." The former, he undertakes to define by mentioning two distinct marks of culture, namely "an appreciation of the finer things of life," and "intelligent sympathy with all great human interests." He modifies Herbert Spencer's definition of education, that education is a preparation for "complete living" by stating that education is training for "social efficiency." While Greek, Latin, French, German and other preparatory subjects so valuable and so universally pursued have their influence in the accomplishment of these two great aims in the development of the child, namely, culture and education, there are many thoughtful people, and the number increases, who believe that drawing, music, manual training, commercial geography and commercial law are equivalent, if not more direct and more concrete means to the same end. There is no doubt that the intelligent public, not interested at all in a survival of antiquities, believes in making use of the best which the world offers of our own as

well as of earlier times. It is often inclined to take the liberal view of the proper means of education and culture which we "heretics in education" are disposed to look upon with favor. I have often wondered whether it would not be easier for the advocates of the old iron clad course of study and of the domination of the high school course of study by the college, to come near gaining their end by admitting gracefully the possibility of education by other means than those believed in from the earliest times.

To illustrate: the orthodox Presbyterian of today talks very little about the doctrines of Calvin, and the orthodox Methodist does not often indulge in similar discussions upon Wesley. Intelligent men are coming more and more to consider questions of life from the vantage point of what we know and believe, and not from what those men believed as a result of their narrower experience. There are many who believe that happiness attained, is not to be measured in terms derived from an inadequate system of belief, but from a system based upon modern conception of modern things.

Some time ago the following questions were submitted to one hundred secondary school men throughout the country, including among others, every high school represented in the membership of this association:

Question 1. Have you noted a growing suspicion among the public that the high schools are costing too much in proportion to the grades? There were 61 answers: 8 schools in large cities and 10 schools in small cities answered "yes"; 14 schools in large cities and 25 schools in small cities answered "no";

4 replies were received from township and private schools: all answered "no".

Among the miscellaneous comments which have been called I note the following: "not growing"; "not where the high school works for the people"; "past maturity;" indicating that conditions were exceedingly alarming. Some said "yes" by persons who object to paying school taxes on general principles," and some said there were no complaints although, to their minds, complaints would be justifiable.

As will be seen from the answers to this question, a very large per cent of the schools interested enough to reply, were ignorant of, if not entirely free from the unrest which some of the schools observe. It is a matter for congratulation if there is so little criticism throughout the country, but I cannot help thinking that it is only a matter of a very short time before this question will have to be met by practically all secondary schools, especially in rapidly growing cities, and I would state in passing that undoubtedly to the conservatism of the colleges in their dealings with the high schools is very largely due the indifference of the schools toward the question.

Question 2. Have claims been made that the demands of the people for utilitarian subjects are not being met? If so, are they justifiable? There were 64 answers to the first part of the question: 36 "yes"; 28 "no". To the second part of the question — as to justness of claim: 8 schools said "partly"; 16 schools said "yes"; 9 schools said "no".

Some comments on the replies in the second part are of interest:

One said "criticism is just if the high school is to serve practical ends." Another said "manual training will meet it."

Of the 28 who replied that the claim is not made that the demands of the people are not being met, 7 said that they had manual training.

Question 3. To what extent do college entrance requirements influence the organization of the course of study in your school?

There were 70 answers: 24 stated that the college entrance examination requirements practically dictated the course of study. 3 replied that "they merely influenced the course of study;" 5 replied "considerably, in some branches, particularly in languages;" 3 replied "do not affect graduation standards at all"; 6 replied "that they were the reason for introducing certain electives, resulting in some cases in small classes"; 22 replied "not much, have a college preparatory course"; 7 replied "considerably, have electives."

If we were to combine these groups into two, those affected by college entrance requirements, and those not, we should find the percentage overwhelming on the side of direct influence of college entrance examinations on the organization of the course of study.

Question 4. What are the other things which determine graduation standards?

There were 58 answers: 6 "experience and tradition"; 3 "best interest of pupil"; 3 "school board"; 7 "preparation for life"; 12 "preparation for business"; 7 "preparation for Normal"; 2 "preparation for professional school"; 1 "growth of power of pupil"; 2 "social demands of pupils"; 4 "local conditions"; 7 "satisfactory completion of four years, or 16 or 15 units work"; 3 "regents' standard" (New York State); 1 "horse sense, only"; (Whether the

individual in question means to infer that college entrance examinations do not involve this much desired quality, I could not determine.)

Question 5. Are there any subjects, well-taught, not accepted for college entrance which, in your opinion, should be accepted?

There were 32 answers: 11 "yes"; 21 "no", or no definite suggestion.

Twenty-seven subjects were suggested from one to fourteen times as subjects which might be given credit by the colleges with advantage. These suggestions might be placed in three groups, which were very generally desired, namely:

1 — business courses, 2 — political economy and civics, and 3 — arts courses, including manual training, mechanical drawing and domestic science.

Question 6. Would a liberalized college entrance standard aid you in satisfying the people that they are getting value received?

There were 59 answers: 27 "yes"; 15 "no"; 9 "liberal enough now"; 5 "probably"; 1 "yes, if uniform;" 1 "let colleges meet high school conditions"; 1 "Western colleges are too liberal now." (Private school.)

If we combine these seven groups, we get those for and against liberalized college requirements: 34 in favor; 25 opposed.

I should like to add my approval of the statement that Western colleges as a whole, are too liberal now. This statement is not true of the best colleges in the West.

Question 7. Would better agreement among colleges as to entrance units help in preventing unfavorable criticism of high schools?

There were 36 answers: 25 "yes"; 11 "no".

I feel very sure that you will be interested in hearing some of the reasons for these answers. Among the affirmatives the following comments were made:

3 said, "make it easier for those who decide late to go to college"; 1 said, "pupils could get preparation without going to private schools or being privately tutored"; 6 said, "would prevent some schools being criticised as not preparing for certain colleges"; 1 said, "the requirements in English and the languages should be cut down"; (I infer that this statement applies to four years of English and the requirement of certain colleges for a second and third language.) 12 said, "greater uniformity should exist, for example: an arrangement like the college Entrance Board"; 4 said, "would enable schools to concentrate more"; 1 said, "would check the further raising of the standard of requirements for entrance beyond the capability of the schools." (This was referred to by only one writer, but it is a statement worthy of our attention. The history of the relations between colleges and secondary schools shows that as soon as the high school has been able to raise its standard to meet a certain condition, the college has immediately announced an increase in its standards, until the present unsatisfactory condition has been settled upon us.) 1 said, "would enable schools to co-ordinate general and particular courses"; 2 said, "would make requirements more definite, for example: four units of Latin instead of one, two, three or four"; 1 said, "by being content to exert slight influence over the high schools"; 1 said, "some colleges take pupils without diplomas, thus destroying our influence."

(This is another point in which we are particularly interested, and in which my school is most vitally concerned. Last year as many as five of my athletes who would do nothing in school, and who were declared ineligible for athletics, were eagerly taken up by three of the institutions of higher education in Indiana, one of whose professors recently said in a public meeting, that "the ethical standards of the high school must come down from the college." Fortunately, I was present on the occasion when this statement was made, and had the opportunity of relating to a rather amused audience some of the particular applications of this out-pouring of ethical standards.)

To turn to those who answered "no" to this question, the following statements were made:

"Those who 'criticise' know little about 'units.'" "Diversity of requirements is more apparent than real." (I feel very sure that there are many principals who would agree with me that the persons who believe the last statement are unusually adept with their calculations.)

Question 8. Is there any other way in which colleges can aid high schools in meeting the demands of the public?

31 offered no suggestions. A number of suggestions were made by others, some that are worth consideration. They are as follows: "Have college men who know about public school work; if possible, let more of them be teachers." "Accept certificate of the state superintendent (as to qualification of the candidate for entrance.)" "College should give less attention to worn out ideals and more to real problems of life." (There were several suggestions

of this sort.) "Colleges are not close to popular demand." "Should set a good example of morals and order." "Should publish their reports on high school inspection." "Should aid in better organization of the whole school system." "Should promote more friendly relations with the high schools." "Should drop foolish requirements of 'so many pages in language,' or 'so much time for a unit,' and should accept certificate of capacity to do certain work." Several declared that the colleges should accept certificates of maturity, good character, etc., without regard to the character of the training. There was quite a general feeling that the colleges should train better teachers. (My experience has led me to suspect that the enormous increase in the attendance of some of our universities is due in part to teachers of doubtful success, who enter these institutions and get degrees, in the hope that what they cannot accomplish by their efforts and worth, may be secured by the degree.) "Should have a course in commerce." (From Wisconsin.) (All school men should read in this connection the article by Mr. Herrick in the *School Review*, of February, 1906, on the Educational Value of a Commercial Course in the High School.) "Should insist upon quality, not quantity." "Should give more credit for science and manual training." "Should get advice from secondary school teachers on entrance examinations." "Should give advance credit, if earned." "They do pretty well now." (For example, the work of the College Entrance Examination Board.)

My observation of the work of the College Entrance Examination Board for several years, has been that there is a tendency on the part of the

examiners to make the work rather too difficult. Several boys who are preparing for Harvard have told me that they would prefer taking the Harvard examination rather than the College Entrance Board examination, on the ground that the College Entrance Board examinations were much more difficult and much more likely to be variable in scope. It would be a very unfortunate thing if such an excellent organization, which has for its main purpose the unification of college preparation, should become unpopular in its zeal to maintain high standards. It is always wise for the teacher to sit down and remind himself occasionally that the only way in which he can meet the problem of the child is to recall his own childhood.

There has been no disposition on my part in discussing this question to undertake to show the colleges what they should do. I feel that my duty and my capacity have been exhausted when I bring to your attention some of the conditions which prevail, and threaten the progress of the best things in secondary education. Again, some of the suggestions of other men who have studied the situation might possibly bring about a solution of our present difficulties. There can be no doubt that a frank and open discussion, and a thorough realization of the relations which exist and which should exist between secondary schools and higher institutions of learning, will develop a better feeling and a larger capacity for good with us all. With these questions crowding upon us, it seems hardly a fitting time to give much attention to the question of the six year high school, however desirable it may be in itself.

I shall consider that this paper will have ac-

complished all that I could possibly hope for it, if it arouses vigorous discussion.

On motion the discussion of Principal Benton's paper was deferred until the second session.

Second Session Friday Afternoon

The session was called to order at 2 o'clock P. M. by the President who announced the discussion of the following question:

Are State Boards of Medical Examiners justified in excluding from their examinations the graduates of Medical Colleges that allow advanced credit for work done in a college of liberal arts?

Frank Billings, M. D.
The University of Chicago

President J. H. T. Main.
Iowa College, Grinnell

Fred C. Zapffe, M. D.
Secretary of the Association of American
Medical Colleges.

The Secretary read the following letter:

THE MINNESOTA STATE BOARD OF MEDICAL EXAMINERS.

O. E. LINJER, M. D., SECRETARY, MINNEAPOLIS.

Secretary's Office: 24 South Fourth Street.
MINNEAPOLIS, Feb. 3, 1906.

**Professor J. V. DENNEY, Secretary North Central
Association of Colleges and Secondary Schools.**

DEAR SIR: Your letter to Dr. Wm. Davis, St. Paul, a member of our State Board of Medical Examiners, has been referred to me. I regret to say that it is impossible for any of the members of our

State Board to be present at the meeting of your Association. The views of the Minnesota State Board of Medical Examiners on the question of recognizing Medical Colleges granting advanced standing for work done in other than Medical Schools may be briefly stated as follows: The laws of this State require four years of study in a *Medical School*, a diploma from a recognized Medical School, and a satisfactory examination before the State Board of Examiners, for a license to practice Medicine. This is the law of the State. The Board can not change it, simply enforce it.

This State will never consent to shorten the course of Medical study, indeed, another year will be added at the first opportunity. The preliminary educational status of candidates appearing before this Board will in the future be closely scrutinized. We hope to secure a pre-medical educational qualification at the meeting of our next State legislature. The medical profession and the people in general of Minnesota urge and demand now, that a pre-medical training equivalent to at least two years study in the academic department of our University, be made a requirement of medical candidates for licensure.

The day is not far distant in this state when four years academic and five years medical work will be required of all who wish to enter upon the practice of Medicine.

Respectfully submitted,

O. E. LINJER, M. D.,

Sec'y State Board of Med. Ex.

Dr. Billings then addressed the Association. The Secretary was unable to obtain a satisfactory report

with it, and those who are entirely indifferent, or, at least, are inactive, neither for nor against the school. Fortunately for education, the first class is comparatively small where the school is doing creditable work. Its influence is usually far-reaching, however, because the representatives of this class are frequently able to touch the people upon one point that is always vulnerable—that of taxation. This class also usually has the use of the columns of the daily press where articles of a character likely to be injurious to the progress of high ideals in general education can be exploited. This class of obstructionists also usually includes the unfortunate wealthy who are childless, or who have the aristocratic aim of the private school to foster. As a natural consequence, what this class lacks in number it makes up in influence.

Here, obstruction is the result, regardless of the often-expressed admission that the schools are doing a great work in the community, the claim being that this work is done at a cost that is incommensurate. The second class is made up of a large body of intelligent citizens who themselves have had the advantages of secondary education at public expense, whose children are now enjoying its benefits, and who have the definite knowledge that the education offered in the public school is far beyond that which the individuals themselves would be able to compass with private means. They further realize that whatever the expense is or may be, the educational product, as expressed in high quality of citizenship, is an investment which is indispensable to the state. The third class is composed of those indifferent people found in every community in entirely too large numbers,

who do not interest themselves in public school affairs, who sometimes send their children to school to get them out of the way, and, who, because some children fail in life, are ready to charge the school with their failure. This class is always ready to cheer the pessimistic utterances of the enemies of public education, and to cry that the public is taxed without value received.

The real occasion of anxiety for the future of the secondary school is not to be looked for on the general ground of the utility of the school, but from a consideration of its enormous and rapid growth. The development of the common schools, while extensive, has been more gradual. There is no opposition to this, even from the enemies of the high school, provided the increase in the available cash keeps pace with the development of the schools. But the case of the high school is different. In some cities within the same time that the population has doubled, the attendance upon high schools has quadrupled; and, whereas, high school teachers could be engaged readily a few years ago, at anywhere from \$700 to \$1,200, to-day these figures do not begin to express the expense. Again, intelligent men have been heard to say that high school teachers ought not to receive any more pay than grade school teachers, in spite of the fact that the demands made of high school teachers in preparation and living, are greatly in excess of demands on grade teachers. Again, the grade teacher in most cities is expected to handle forty to fifty pupils at the same time that the high school teacher handles twenty-five or thirty. More than this, the cost of equipment for the handling of secondary subjects is frequently large. As a consequence the rapid

increase in the attendance upon the high school, and the greater per capita cost of instruction, not only in respect to the expense for teachers, but for equipment and even for buildings, are just now in many cities bringing secondary schools sharply up before the people for serious consideration.

The people are asking, "are the needs of our children being met by this expensive institution; are the demands of college entrance requirements, which are largely influencing the course of study in most schools, interfering with the proper training of our children in the other lines of work which, in our opinion, they should have?" In many schools which have a portion of their subjects required, and offer electives as a part of the requirement for graduation, some parents have discovered that at the end of the four years' course, even when the work has been well done, the character and variety of the work are not such as to meet the requirements of some college upon which they have decided for their child. It does not matter that the work done is of a high character; that the training received, although along a different line from that prescribed by the institution in question, has been thorough, and that it has developed in the child a power to think and to do, which renders him able to take his place among his fellows. These parents are asking what should be a standard of fitness for entrance to college. Is it specific preparation in certain grooves? Why should it not be a question of capacity? They look over the catalogues of the colleges and, unless the principal is exceedingly tactful, they will discover that the committee of this association appointed to consider requirements for the bachelor's degree, was justified in assuming that

the work of the commission on accrediting schools might well include the work of accrediting colleges. This committee found, as they stated in their report, that in attempting to unify the various systems of units, tabulation involved great difficulties; that many catalogues are vague or indefinite in the statement of requirements, and in some cases decidedly inconsistent. A reference to the tabulation given on pages 38 to 46 of the report of the tenth meeting of this association will show that there is an amazing diversity of requirements. Any one who undertakes to tabulate these study schemes for himself, as I have done, will have this forced upon him in no uncertain way. The duty of the school to the parent in question cannot be ignored, for is the school not his school? And has he not the right to expect that four years work shall produce results in his children which have been produced in the children of others?

One has only to go through the volumes of the National Educational Association reports from 1890 to the present time to realize that decided improvement has been made along this line. There are certain definite things which all colleges require and which all schools might well require as a basis for graduation. There certainly can be no objection to requiring three years of English, two and one half years of mathematics, one year of history, one year of science, and three or four years of a language other than English. Colleges generally require these and more. A college president, discussing an article on universities and schools, by Superintendent Cooper, in the N. E. A. report of 1891, deplored the number of subjects already in the high school which were not needed for college preparation. He thought that the

4 replies were received from township and private schools: all answered "no".

Among the miscellaneous comments which have been culled, I note the following: "not growing"; "not where the high school works for the people"; "past maturity;" indicating that conditions were exceedingly alarming. Some said "yes, by persons who object to paying school taxes on general principles," and some said there were no complaints although, to their minds, complaints would be justifiable.

As will be seen from the answers to this question, a very large per cent of the schools interested enough to reply, were ignorant of, if not entirely free from the unrest which some of the schools observe. It is a matter for congratulation if there is so little criticism throughout the country, but I cannot help thinking that it is only a matter of a very short time before this question will have to be met by practically all secondary schools, especially in rapidly growing cities, and I would state in passing that undoubtedly to the conservatism of the colleges in their dealings with the high schools is very largely due the indifference of the schools toward the question.

Question 2. Have claims been made that the demands of the people for utilitarian subjects are not being met? If so, are they justifiable? There were 64 answers to the first part of the question: 36 "yes"; 28 "no". To the second part of the question — as to justness of claim: 8 schools said "partly"; 16 schools said "yes"; 9 schools said "no".

Some comments on the replies in the second part are of interest:

One said "criticism is just if the high school is to serve practical ends." Another said "manual training will meet it."

Of the 28 who replied that the claim is not made that the demands of the people are not being met, 7 said that they had manual training.

Question 3. To what extent do college entrance requirements influence the organization of the course of study in your school?

There were 70 answers: 24 stated that the college entrance examination requirements practically dictated the course of study. 3 replied that "they merely influenced the course of study;" 5 replied "considerably, in some branches, particularly in languages;" 3 replied "do not affect graduation standards at all"; 6 replied "that they were the reason for introducing certain electives, resulting in some cases in small classes"; 22 replied "not much, have a college preparatory course"; 7 replied "considerably, have electives."

If we were to combine these groups into two, those affected by college entrance requirements, and those not, we should find the percentage overwhelming on the side of direct influence of college entrance examinations on the organization of the course of study.

Question 4. What are the other things which determine graduation standards?

There were 58 answers: 6 "experience and tradition"; 3 "best interest of pupil"; 3 "school board"; 7 "preparation for life"; 12 "preparation for business"; 7 "preparation for Normal"; 2 "preparation for professional school"; 1 "growth of power of pupil"; 2 "social demands of pupils"; 4 "local conditions"; 7 "satisfactory completion of four years, or 16 or 15 units work"; 3 "regents' standard" (New York State); 1 "horse sense, only"; (Whether the

individual in question means to infer that college entrance examinations do not involve this much desired quality, I could not determine.)

Question 5. Are there any subjects, well-taught, not accepted for college entrance which, in your opinion, should be accepted?

There were 32 answers: 11 "yes"; 21 "no", or no definite suggestion.

Twenty-seven subjects were suggested from one to fourteen times as subjects which might be given credit by the colleges with advantage. These suggestions might be placed in three groups, which were very generally desired, namely:

1 — business courses, 2 — political economy and civics, and 3 — arts courses, including manual training, mechanical drawing and domestic science.

Question 6. Would a liberalized college entrance standard aid you in satisfying the people that they are getting value received?

There were 59 answers: 27 "yes"; 15 "no"; 9 "liberal enough now"; 5 "probably"; 1 "yes, if uniform;" 1 "let colleges meet high school conditions"; 1 "Western colleges are too liberal now." (Private school.)

If we combine these seven groups, we get those for and against liberalized college requirements: 34 in favor; 25 opposed.

I should like to add my approval of the statement that Western colleges as a whole, are too liberal now. This statement is not true of the best colleges in the West.

Question 7. Would better agreement among colleges as to entrance units help in preventing unfavorable criticism of high schools?

There were 36 answers: 25 "yes"; 11 "no".

I feel very sure that you will be interested in hearing some of the reasons for these answers. Among the affirmatives the following comments were made:

3 said, "make it easier for those who decide late to go to college"; 1 said, "pupils could get preparation without going to private schools or being privately tutored"; 6 said, "would prevent some schools being criticised as not preparing for certain colleges"; 1 said, "the requirements in English and the languages should be cut down"; (I infer that this statement applies to four years of English and the requirement of certain colleges for a second and third language.) 12 said, "greater uniformity should exist, for example: an arrangement like the College Entrance Board"; 4 said, "would enable schools to concentrate more"; 1 said, "would check the further raising of the standard of requirements for entrance beyond the capability of the schools." (This was referred to by only one writer, but it is a statement worthy of our attention. The history of the relations between colleges and secondary schools shows that as soon as the high school has been able to raise its standard to meet a certain condition, the college has immediately announced an increase in its standards, until the present unsatisfactory condition has been settled upon us.) 1 said, "would enable schools to co-ordinate general and particular courses"; 2 said, "would make requirements more definite, for example: four units of Latin instead of one, two, three or four"; 1 said, "by being content to exert slight influence over the high schools"; 1 said, "some colleges take pupils without diplomas, thus destroying our influence."

(This is another point in which we are particularly interested, and in which my school is most vitally concerned. Last year as many as five of my athletes who would do nothing in school, and who were declared ineligible for athletics, were eagerly taken up by three of the institutions of higher education in Indiana, one of whose professors recently said in a public meeting, that "the ethical standards of the high school must come down from the college." Fortunately, I was present on the occasion when this statement was made, and had the opportunity of relating to a rather amused audience some of the particular applications of this out-pouring of ethical standards.)

To turn to those who answered "no" to this question, the following statements were made:

"Those who 'criticise' know little about 'units.'" "Diversity of requirements is more apparent than real." (I feel very sure that there are many principals who would agree with me that the persons who believe the last statement are unusually adept with their calculations.)

Question 8. Is there any other way in which colleges can aid high schools in meeting the demands of the public?

31 offered no suggestions. A number of suggestions were made by others, some that are worth consideration. They are as follows: "Have college men who know about public school work; if possible, let more of them be teachers." "Accept certificate of the state superintendent (as to qualification of the candidate for entrance.)" "College should give less attention to worn out ideals and more to real problems of life." (There were several suggestions

of this sort.) "Colleges are not close to popular demand." "Should set a good example of morals and order." "Should publish their reports on high school inspection." "Should aid in better organization of the whole school system." "Should promote more friendly relations with the high schools." "Should drop foolish requirements of 'so many pages in language,' or 'so much time for a unit,' and should accept certificate of capacity to do certain work." Several declared that the colleges should accept certificates of maturity, good character, etc., without regard to the character of the training. There was quite a general feeling that the colleges should train better teachers. (My experience has led me to suspect that the enormous increase in the attendance of some of our universities is due in part to teachers of doubtful success, who enter these institutions and get degrees, in the hope that what they cannot accomplish by their efforts and worth, may be secured by the degree.) "Should have a course in commerce." (From Wisconsin.) (All school men should read in this connection the article by Mr. Herrick in the *School Review*, of February, 1906, on the Educational Value of a Commercial Course in the High School.) "Should insist upon quality, not quantity." "Should give more credit for science and manual training." "Should get advice from secondary school teachers on entrance examinations." "Should give advance credit, if earned." "They do pretty well now." (For example, the work of the College Entrance Examination Board.)

My observation of the work of the College Entrance Examination Board for several years, has been that there is a tendency on the part of the

Second Session Friday Afternoon

The Association was called to order at 2 o'clock p. m., by the President, who announced for discussion the following question:

Are State Boards of Medical Examiners justified in excluding from their examinations the graduates of Medical Colleges that allow advanced credit for work done in a college of liberal arts?

Frank Billings, M. D.,
The University of Chicago.

President J. H. T. Main,
Iowa College, Grinnell.

Fred C. Zapffe, M. D.,
Secretary of the Association of American
Medical Colleges.

The Secretary read the following letter:

THE MINNESOTA STATE BOARD OF MEDICAL EXAMINERS.

O. E. LINJER, M. D., SECRETARY, MINNEAPOLIS.

*Secretary's Office: 24 South Fourth Street.
MINNEAPOLIS, Feb. 3, 1906.*

Professor J. V. DENNEY, *Secretary North Central Association of Colleges and Secondary Schools.*

DEAR SIR: Your letter to Dr. Wm. Davis, St. Paul, a member of our State Board of Medical Examiners, has been referred to me. I regret to say that it is impossible for any of the members of our

State Board to be present at the meeting of your Association. The views of the Minnesota State Board of Medical Examiners on the question of recognizing Medical Colleges granting advanced standing for work done in other than Medical Schools may be briefly stated as follows: The laws of this State require four years of study in a *Medical School*, a diploma from a recognized Medical School, and a satisfactory examination before the State Board of Examiners, for a license to practice Medicine. This is the law of the State. The Board can not change it, simply enforce it.

This State will never consent to shorten the course of Medical study, indeed, another year will be added at the first opportunity. The preliminary educational status of candidates appearing before this Board will in the future be closely scrutinized. We hope to secure a pre-medical educational qualification at the meeting of our next State legislature. The medical profession and the people in general of Minnesota urge and demand now, that a pre-medical training equivalent to at least two years study in the academic department of our University, be made a requirement of medical candidates for licensure.

The day is not far distant in this state when four years academic and five years medical work will be required of all who wish to enter upon the practice of Medicine.

Respectfully submitted,

O. E. LINJER, M. D.,

Sec'y State Board of Med. Ex.

Dr. Billings then addressed the Association. The Secretary was unable to obtain a satisfactory report

3. By a method combining examination, and accrediting.

4. By examination, on presentation of a sworn statement that four consecutive years of seven months each have been spent in a medical college, and that no credit has been given for college work, this statement to be accompanied by the diploma of the medical college.

The fourth method is the one adopted, essentially, by the State Boards of Minnesota, Iowa, and South Dakota. It is the method with which institutions in the middle west are chiefly concerned.

The primary purpose of such a regulation would seem to be to discredit the work of the colleges in the *pure sciences* fundamental to medical training. It indicates that the medical authorities have arbitrarily excluded, as unworthy of consideration, all college work whatsoever. It means that histology, embryology, bacteriology and other subjects that have medical applications, have no value in the estimation of examiners, unless they are taken in a medical college. These subjects, however adequately and thoroughly they may be taught in the colleges as pure sciences, are not only to be rejected by the medical colleges, but the examiners assume to deny recognition to medical colleges giving such credit, in addition to denying the privilege of examination to individual candidates. To a layman this looks like an arbitrary and unwarranted regulation.

We are assured, however, that this method of examination is intended to prevent the indiscriminate giving of credit by ambitious medical colleges, willing to secure students at any cost. But there is nothing in the published regulations to suggest such

an intention. The whole aim seems to be to compel students to take four years, according to the definition of the board, in a medical college, regardless of the quality of the work as to goodness that might be done in the college of arts, and also regardless of the quality of the work as to poorness that might be done in the professional school. The board assumes that "Podunk Medical College" with poor equipment and inadequate teaching force will give better preparation in the pure sciences fundamental to medicine than any college whatsoever can give, under any possible condition of instruction and equipment. This method of treatment is not based on reasonable principles. If the board, by its examination, can determine the inadequacy of the teaching in a poor medical college, it might also be supposed to do it for a college of arts.

The regulation we are discussing virtually says to students that four years, or even less in a high school, provide a better preparation for medical education than four years in a high school and four years in a college. Isn't this a fair interpretation of the regulation which in effect says, "we shall accept you for examination with eight years of preparation provided four years have been in the medical school "(four consecutive years of seven months each)," but we shall not even admit you to the examination if you have had four years in a high school and seven years more in a college of arts and a college of medicine, unless you can prove that no credit was given for any medical work done in the college? Eleven years of preparation are discounted so that before the board they count for less than the eight years in high school and medical college. This point is emphasized

strongly by the fact that the student does not ask for a ‘flat’ credit for a bachelor’s degree. He simply asks what is just and reasonable—an examination for work actually done, which examination is to be set by a board presumably competent to get at the facts.

Again such a ruling ‘recommends’ students who are obliged for pecuniary or other reasons, to shorten their period of preparation, to desert the independent college with no professional schools and go to the composite schools where the medical college and the college of arts are under the same management, and where the combined course of six or seven years may be taken without conflicting with the requirements of medical boards.

In general such an examination regulation tends to discourage, in this ambitious, hurrying age, young men from giving due consideration to the value of college training. In so far as it does this it is an injury of the most positive sort to the medical profession, and in the end it will work greater damage to the medical colleges than to the colleges of arts.

The medical gentlemen—those who support the regulation in question—tell us that they have been working hard to improve the “quality of medical students” and now that they have finally secured, after many trials and tribulations, consent to a high school course as a requirement for admission, they do not wish to be deprived of any of the fruits of their hard earned achievement, by giving the colleges the possibility of one year or less (even though it be equivalent and proven so by test) out of four additional years of preparation. A most excellent jest truly!

The medical colleges have before them for examination and answer questions that touch upon the very

secrets of existence, problems that demand the highest grade of understanding and training. They demand maturity. If the college of arts merely gave capacity for understanding, it would be worth while for the medical college and the examining boards to offer a premium to get it. But neither colleges of repute, nor students, ask recognition for this unmeasurable element. They ask for a reasonable chance to secure credit for what they have done. There is a broad, general basis of scientific principle involved in the study, for example, of histology. Now if the right man is teaching this subject, he will secure results that are invaluable for the medical man. The medical college needs men trained in that way — in fact it needs many more than the colleges, under present conditions, can possibly supply. If students entering the medical colleges do not have such training, they must get it after they matriculate. The medical schools would much better spend their time on the practical applications of the subject.

There is certainly a debatable ground between the college and the medical school. The college affirms that it can teach histology, embryology, and some other subjects as pure sciences in a way to meet the demands of medical science. The medical boards deny this, and affirm that no college man can teach a medical subject unless he is a doctor of medicine. The State boards ought to be able to settle this difference of view by examination. If the State board examination in a matter of that sort is unsatisfactory, it may be doubted whether it can reach the facts in other disputed points. If it *can* reach the facts, but deliberately chooses not to do so then it is guilty of an injustice to the candidate for examination, to the col-

lege, to the medical school, and to medical education itself.

On no reasonable basis is a State board justified in denying examination to medical graduates who have received college credit.

The consensus of opinion in the best informed quarters, the medical men themselves being the judges, is that properly equipped colleges can teach the pure medical sciences. Students with college credit have repeatedly demonstrated their ability to pass the most rigid examinations. The Medical Examining Board of Great Britain gives credit for such work. In fact it does more. It gives a year's "credit for chemistry, physics, and biology when studied in a teaching institution."

The traditional view regarding "culture subjects" will no longer hold. Many subjects, not long ago regarded as technical and professional, are now included in the college curriculum. The college will be expected to keep itself in adjustment with the demands of its time. If it does not do so, it has no special right to live. Hence it will, if need be, ask for recognition for the pure sciences in its courses of study which are fundamental to medicine. It will of course endeavor to satisfy all reasonable requirements in its teaching.

The question we are discussing is one of the highest importance to the educational interests of this country — especially to those of the middle west. The question is one, above all others, that requires coöperative treatment. It can not be settled by any one of the parties to the discussion, acting alone. There are three interests involved — the college of arts, the medical school, the State board. The North

Central Association of Colleges and Secondary Schools is in a position to contribute much to the wise and happy adjustment of the difficulties involved in the question. I suggest that a committee be appointed to investigate the whole matter and report at the next annual meeting.

ARE STATE BOARDS OF MEDICAL EXAMINERS JUSTIFIED IN EXCLUDING FROM EXAMINATIONS THE GRADUATES OF MEDICAL COLLEGES THAT ALLOW ADVANCED CREDIT FOR WORK DONE IN A COLLEGE OF LIBERAL ARTS?

BY FRED C. ZAPFFE, M. D., CHICAGO, ILLINOIS, SECRETARY OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

Your Committee has asked me to discuss the affirmative of this question, and in doing so I voice the sentiment expressed by the majority of colleges represented at the last meeting of the Association of American Medical Colleges, held in Pittsburg, March 19, 1906. My personal views I shall refer to later.

Before answering the question put above, let us inquire into the reasons why a number of our State Examining Boards are refusing recognition to medical colleges that allow advanced credit for work done in a college of liberal arts. It is not necessary for me to call your attention to the fact that the mere possession of a degree means nothing; that is, it may mean little or it may mean much. So much confusion exists in what we are pleased to term our educational system, that it is entirely out of the question

**lege, or the medical school, and to medical education
Board.**

*(On no reasonable basis is a State board justified
in denying examination to medical graduates who
have received college credit.)*

The expression of opinion in the best informed quarters, the medical men themselves being the judges, is that properly equipped colleges can teach the pure medical sciences. Students with college credit have repeatedly demonstrated their ability to pass the most rigid examinations. The Medical Examining Board of Great Britain gives credit for such work. In fact it does more. It gives a year's "credit for chemistry, physics, and biology when studied in a teaching institution."

The traditional view regarding "culture subjects" will no longer hold. Many subjects, not long ago regarded as technical and professional, are now included in the college curriculum. The college will be expected to keep itself in adjustment with the demands of its time. If it does not do so, it has no special right to live. Hence it will, if need be, ask for recognition for the pure sciences in its courses of study which are fundamental to medicine. It will of course endeavor to satisfy all reasonable requirements in its teaching.

The question we are discussing is one of the highest importance to the educational interests of this country—especially to those of the middle west. The question is one, above all others, that requires co-operative treatment. It can not be settled by any one of the parties to the discussion, acting alone. There are three interests involved—the college of arts, the medical school, the State board. The North

Central Association of Colleges and Secondary Schools is in a position to contribute much to the wise and happy adjustment of the difficulties involved in the question. I suggest that a committee be appointed to investigate the whole matter and report at the next annual meeting.

ARE STATE BOARDS OF MEDICAL EXAMINERS JUSTIFIED IN EXCLUDING FROM EXAMINATIONS THE GRADUATES OF MEDICAL COLLEGES THAT ALLOW ADVANCED CREDIT FOR WORK DONE IN A COLLEGE OF LIBERAL ARTS?

BY FRED C. ZAPFFE, M. D., CHICAGO, ILLINOIS, SECRETARY OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

Your Committee has asked me to discuss the affirmative of this question, and in doing so I voice the sentiment expressed by the majority of colleges represented at the last meeting of the Association of American Medical Colleges, held in Pittsburg, March 19, 1906. My personal views I shall refer to later.

Before answering the question put above, let us inquire into the reasons why a number of our State Examining Boards are refusing recognition to medical colleges that allow advanced credit for work done in a college of liberal arts. It is not necessary for me to call your attention to the fact that the mere possession of a degree means nothing; that is, it may mean little or it may mean much. So much confusion exists in what we are pleased to term our educational system, that it is entirely out of the question

to attempt to formulate an adequate basis for the baccalaureate degree, one that would apply to every college, academy, and high school (there are high schools that are empowered to confer degrees). Furthermore, some of our best known institutions do not teach any of the subjects, except chemistry, that are embraced in the first or second years of the medical curriculum. In such instances we have been accustomed to grant a credit of one year in time to students coming from these colleges simply because it was customary to do so. Without entering into the value of a college training, both culturally and technically, there remains the fact that these students were obliged to put in a large amount of extra time. They were hurried in their work, and naturally it could not have been as good as it would be expected to be if the student had not received a time credit.

Under these conditions it is hardly fair to blame a state examining board for taking what appears to be an arbitrary step, because they have no means of determining what a degree represents. Of course, the literary school takes the position that the Board should examine the courses offered by colleges of liberal arts, but that is not the province of the examining board. As the matter stands at present, it seems that the colleges are rebelling against the abolition of the time-honored custom of recognizing a degree by allowing some credit for it.

There is no intention either on the part of the Board or the medical school to discredit a literary training; nor do they desire to create the impression that a high school training is just as good as, or the equivalent of, a college training. Every medical school would rather have every one of its matricu-

lants possess a college training than to have only a few, as is now the case. This matter is evolving itself slowly, and in time the entrance requirement for the medical course will be a college degree. Many medical schools are now requiring one and two years of college training; a few are requiring three years, and two make the baccalaureate degree the prerequisite. One college specifies certain work that must have been done by the baccalaureate. Before the high school diploma was made the minimum entrance requirement, there was much discussion on why a high school graduate should not receive some credit when his education was superior to that of the student possessing only a common school education. We are in the same position now with reference to the relative superiority of a college training over a high school training. Therefore, I am convinced that it is only a matter of a few years before at least a part of the college course will be required for matriculation in a medical school.

Can the subjects embraced in the medical curriculum be taught efficiently in the medical school? Medical men say no. Why? In the literary college these subjects are taught as pure sciences, whereas in the medical school they are taught as applied sciences. Which is of greatest advantage to the practitioner of medicine? Learning the subject as a pure science, he does not receive any of the practical phases of histology, embryology, etc.; whereas learning them as applied sciences, he not only gets that phase of the subject, but also some of the pure science phase. It is claimed by medical men that this is an advantage, although they would prefer to have a thorough grounding both in the pure science and in the applied

science. However, as the matter stands now, with but few exceptions, we are obliged to choose either one or the other.

As a rule, the literary college does not spend as much time in teaching these subjects as does the medical school. The teacher is a scientist and not a practitioner of medicine. There is no disposition on the part of the medical man to depreciate the learning and ability to teach of the scientific man, but they miss in him that practical appreciation of the subject which is so desirable for the student who intends to enter the medical profession. The equipment in many literary schools is not only the equal of, but it is often superior to the equipment possessed by some medical schools. But in discussing this question we must bear in mind that we are not discussing the poor medical school or the poor literary college, but we are discussing what should represent the average.

I have been informed by one of your own number that there are not over a dozen, and probably not more than half a dozen, colleges in the country that are in condition to teach the medical subjects in a satisfactory manner. If that is true, then it seems that we are discussing something that is the exception rather than the rule. Nevertheless, these few schools are entitled to recognition. They must receive justice. If they are doing any work that is deserving of recognition, it seems to me that medical colleges and state examining boards should give credit for it.

What subjects of the medical course are taught by literary colleges? Chemistry forms a part of the curriculum of every college. Some colleges offer inorganic, organic and some physiologic chemistry,

while others offer only the first two parts mentioned. As a rule, with the exception, perhaps, of the chemistry of the carbon compounds, the average literary school is offering a course that is the full equivalent of the same work as it is done in the average medical school.

Biology and embryology are also taught by nearly all the literary colleges, but inasmuch as very few medical schools are offering biology in their course, it does not enter into the discussion at this time. Its value as a preliminary to anatomy is appreciated fully, which is shown in that the medical school does not include biology in its course. So far as I have been able to learn, only the pure scientific principles of embryology are taught; that is, but little time is spent on mammalian embryology, and that little time is put in on the fetal membranes. Hence, by comparing this course in embryology with that taught in the medical school (not including here the medical school which is an integral part of a university, state or otherwise), it will be seen that the two courses are entirely different; yet the student who has had the embryology in the literary school is better prepared to take up the work in the medical school, but these two courses are by no means equivalents.

Some literary colleges teach histology in connection with embryology, or biology, or physiology; but, as a rule, the course embraces only the technical side of the subject, that is, the preparation of specimens, stains, and so forth. A student who has had this course is familiar with the microscope, and with his-tologic technique, and in that he has the advantage over the high school graduate. He is better prepared to continue the work. A few colleges teach the whole

subject of histology, but without any reference whatever to its practical phase. It is not applied to medicine, but forms a part of the general training of the student.

While a few of the colleges are attempting to do work in physiology and anatomy, the consensus of opinion, even among college men, is that it is impractical for colleges to attempt this work. These two subjects come nearer being purely medical subjects than any of those mentioned previously, although no one can deny the value of a general cultural training including a knowledge of the principles of physiology. Nevertheless, the little work that can be done in physiology by the literary school would in no way apply on the course given by the medical school. As to anatomy, osteology can, without question, be taught by the literary college, but that is not half the anatomy taught in the freshman year in the medical school. So that it will be seen that but little of all this work can be made to apply on the medical course, surely not more than three or four hundred hours.

Should the prospective medical student do college work before entering the medical school? Yes, decidedly so. Although he now receives no time credit for the work done there, he receives subject credit and he has the advantage over the other students in that he has had a preliminary training that will enable him to grasp the work done in the medical school better and that will make of him, in the end, a better physician and a better man. It seems to me that this is a reward which cannot be appreciated enough. We need good physicians, and the college graduate, as a rule, is prepared to supply this demand.

This is a very difficult problem to solve. The medical school has rights which must be recognized, and the literary college has its rights. On the one hand, the medical school is unwilling to give up one year at the beginning of its course, and the literary school is unwilling to give up one year at the end of its course. I believe both are right, because in either case the student is missing something that is of more than passing value. It has been said that the senior year of the college course is the most important of the four. The freshman year of the medical course is also the most important of the four, because it is here that the student is initiated into the beginning of things, and at no time during the remaining three years can he make up what he has missed in the first year.

Granted, that an understanding can be arrived at between the two parties concerned, who shall be the judges? The colleges, the medical school, the state examining board, or parties not concerned in the controversy? Each would rather yield to the other, and yet none of the parties is willing to do the work. Universities are in a position to so mold their courses that the two dovetail, in a measure, but that does not help the unaffiliated college, or medical school. Is there only one solution of the problem? Must the baccalaureate degree be made the entrance requirement? In that case the courses of the literary college must undergo a most careful and thorough revision, so that the prospective medical student will get just a little more than a broad training. It is not advisable, neither is it desirable, that his course should be shaped to medicine, because we do not shape courses to law, to theology, or to any other profes-

sion, but the medical course is a longer one than any other of the professional courses, and, in fact, it is not long enough. Several medical colleges have added another year to their course, although that year is still an optional one. Before long, it will be required, and we shall have five years of work in the medical school.

The Association of American Medical Colleges adopted a resolution requiring four years of residence in the medical school. Next year that resolution will come up as an amendment to our constitution, and it seems now that the amendment will be adopted with as much unanimity as was displayed when the resolution was presented this year. In the Association are included not only the so-called independent medical colleges and the affiliated medical colleges, but university schools as well. Therefore, the sentiment which prevailed at our last meeting represents the opinions of all these schools. It seems to me that it is desirable that your association appoint a committee which will discuss this question with the college association at its next meeting, to be held in Richmond, Virginia, March 18, 1907, because only in that way is it possible to bring about harmonious action. It is useless for us to discuss this question, because we feel that we know what we want. You are in the same position. Both may be right, and both may be wrong. By discussing the matter together, the question can be solved in a manner that will be satisfactory to both parties. I trust that you will take some action on this.

PRESIDENT THWING:

I move that the President appoint a committee of

three to investigate this whole matter and to report at the next meeting of the Association.

The motion was seconded and adopted.

The President appointed the following: President H. C. King of Oberlin College, Dr. Fred C. Zapffe, of Chicago; and Dean Edwin A. Birge of the University of Wisconsin.

The following paper was then presented by Director G. N. Carman, Lewis Institute, Chicago.

SHALL WE ACCREDIT COLLEGES?

DIRECTOR G. N. CARMAN, LEWIS INSTITUTE, CHICAGO.

It is now five years since the commission on Accredited Schools was organized. It was made the duty of the Commission to do five things, three of which relate to the high schools and two to the colleges. We have confined ourselves chiefly to the high school part of the programme (1) by defining unit courses of study, (2) by securing uniformity in the standards and methods of high school inspection, and (3) by preparing a list of accredited high schools. With reference to the colleges, it was made the duty of the Commission (1) to serve as a standing committee on uniformity of admission requirements and (2) to formulate and report methods and standards for the assignment of college credit for work done in high schools in advance of the college entrance requirements. The admission requirements of the colleges and universities have, as a result of what has already been done, become more nearly uniform although the Commission has taken no action for the purpose of securing uniformity of admission requirements.

The Commission has done nothing however to encourage high schools to do college work by formulating standards for the assignment of college credit. To be sure we have gone on record as favoring the general principle that colleges should give advanced credit for secondary school work, the amount to be awarded being determined by the college which the student enters. But how shall the colleges determine the amount of credit to be awarded, and how may the schools know what to expect?

The Commission has not done as much as it was authorized to do in answering these questions. If it is desirable to encourage high schools to do college work, definite standards should be agreed upon in those subjects which may be taught in either high school or college. This means making definitions of units of college work as well as units of secondary school work and means accrediting colleges as well as high schools.

The advisability of extending the work of the secondary school into the college field is closely connected with the question of what should be the length and character of the college curriculum, so that it seems necessary to consider briefly the present state of this question, to which so much attention has been given since the organization of the Commission.

Taking the country as a whole, we seem to be farther apart in theory and practice as to the requirements for the bachelor's degree than we were five years ago. In President Eliot's address on American Universities delivered at Yale last November he said "Most of the universities receive their pupils from the secondary school in such a condition that they feel obliged to devote one year, or even more, to

studies appropriate to the secondary schools but not pursued there. They combine with these belated subjects a few of the most elementary subjects appropriate to colleges, and thus make up a prescribed Freshman year, or in some instances, a prescribed course for the Freshman and Sophomore years. This policy is of course a temporary one. It has already disappeared in some of the strongest institutions; and its complete disappearance in the American colleges and universities is only a question of time, for its evils are considerable. It reduces undesirably the number of years which the student can devote to the subject, or subjects, of his choice." President Eliot's position seems to be that all prescribed work is secondary school work and should be completed before the student enters college; that the student should not enter a college or a university until he is prepared to specialize; and that no institution should be called a college or a university that does not furnish opportunities for one to devote his entire time to the subject or subjects of his choice. It is the policy of Harvard to give the bachelor's degree after the student has had an opportunity of doing three years of special advanced work.

President Hadley, arguing that the significance of the college is primarily social, maintains that the subjects studied are of less significance than the life that is lived in colleges, and that a period of four years, from 18 to 22, or from 19 to 23, is none too long to give the training that one should have who would secure a liberal education.

Columbia University and most of the universities of this Association allow one or two years of profes-

sional or technical work to count for the bachelor's degree.

We are all familiar with the views that were held by President Harper. He said in 1902, "Ten years from now the high schools all over the country will have added fifth and sixth years and will be doing the college work which now falls to the first two years of the college."

At the meeting of this Association, held in 1903, Professor Julius Sachs, who is at the head of two important secondary schools in New York City, took the opposite view. He said, "Speaking now for the secondary schools and as a member of the secondary profession, the feeling that is most prominent in my mind is that no greater danger besets the secondary teacher than the blind hope that he can at some time or other, or through some peculiar circumstances, supplant the work of the early college years. I believe we are as far removed from that as it is conceivable to be at the present moment."

One who reads Professor Sachs's defense of his position, in the Educational Review for January, 1906, and President Hadley's article, in the Century for April, 1905, may see what the real issue is. I think it may be fairly stated as the aristocratic vs. the democratic conception of all education in advance of the elementary school. Yale and Princeton, and the colleges that follow their lead, doubtless satisfy a real demand when they maintain a four-year college course, intact, for those whose tastes and circumstances enable them to take advantage of the opportunities offered. These institutions need make no concessions to the fitting schools on the one hand or to the professional schools on the other hand. There

are also many private schools, besides those presided over by Dr. Sachs, which find it to their advantage to satisfy the demand that they serve as fitting schools for such colleges. Were the colleges and secondary schools of the North Central States limited to institutions of this type, there would be nothing for this Association to do but to consider college entrance requirements.

But with the changing of the requirements for the bachelor's degree there has come about a change of conditions under which the degree may be obtained. It is no longer essential that all the work should be taken in the same institution. In order that the needs of our territory as a whole may be met it should be possible for one student to take a part of his college course in an advanced high school and the rest in a university; while another may be so situated that the small college with its preparatory department offers the needed opportunity. So varied are the conditions that prevail that varied agencies are needed if the best educational advantages are to be within reach of all our youth who aspire to a college training. The important question is not when or where the bachelor's degree should be given, nor indeed what it shall stand for. Titles and degrees as such have but little significance, and it may be just as well that such is the case. But it is important, to use the words of Dr. Elmer Brown, that "there be no *cul-de-sac* in the educational systems of the republic, but that instead every child, to the remotest district of our land, shall find the humble school of his neighborhood opening up into the higher schools, and so on up into the highest universities."

The Commission on Accredited Schools was or-

ganized "to establish a definite form of affiliation and credit, fixed, comprehensive, and uniform, between the colleges and secondary schools of the North Central States." If this means anything, it means that a system should be put into operation by which the student who has done one, two, or even three years of college work in one institution may know definitely in advance what credit he will receive if he passes to another. This implies definitions of units of college work corresponding to the units of secondary school work as now defined. It would appear that the Commission on Accredited Schools cannot accomplish what it was designed to do without becoming a Commission on Accredited Schools and Colleges.

Three years ago a committee was appointed, of which President Thwing was chairman, to take into consideration the advisability of extending the work of the Commission so as to include accredited colleges, and to determine what should be the requirements for the bachelor's degree. The committee has made two reports, but the only reference to accrediting colleges is the following: "It has been suggested that the committee draw up what might be called a list of accredited colleges coördinate with a list of accredited fitting schools. The committee is loath to make such a classification. The attempt is beset by serious difficulties."

It was not anticipated that the committee would prepare a list of accredited colleges, but it was hoped that the question of carrying the work of the Commission into the college field would receive consideration.

The object of our Association and the Commission on Accredited Schools is "to establish fixed and uni-

form relations between the colleges and the secondary schools of the North Central States," and in the process, and as a means, of establishing such relations it is quite as important that attention be given to the colleges as to the secondary schools. It is clearly apparent that the work of the Commission should not be confined, like that of the College Entrance Examination Board, to the consideration of college entrance requirements.

As a matter of fact this Association presupposes a list of accredited colleges as well as a list of accredited schools. The call for a meeting to form the Association was issued by the presidents of the University of Michigan, the University of Wisconsin, the Northwestern University, the University of Chicago, and a committee of the Michigan Schoolmasters' Club. Invitations were sent to several prominent representatives of higher and of secondary education in the states of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Nebraska, and Kansas.

One of the questions submitted for consideration at the preliminary meeting for organization was "What shall be the qualification for membership in the Association?" The charter members, as reported by the Committee on Constitution and Nominations, were those who received invitations to the conference and were actually represented at the meeting. The colleges in this list of charter members were Ohio State University, Western Reserve University, Oberlin College; Ohio Wesleyan University, the University of Michigan, Albion College, Indiana University, Wabash College, DePauw University, University of Illinois, Northwestern University, University of Chi-

sional or technical work to count for the bachelor's degree.

We are all familiar with the views that were held by President Harper. He said in 1902, "Ten years from now the high schools all over the country will have added fifth and sixth years and will be doing the college work which now falls to the first two years of the college."

At the meeting of this Association, held in 1903, Professor Julius Sachs, who is at the head of two important secondary schools in New York City, took the opposite view. He said, "Speaking now for the secondary schools and as a member of the secondary profession, the feeling that is most prominent in my mind is that no greater danger besets the secondary teacher than the blind hope that he can at some time or other, or through some peculiar circumstances, supplant the work of the early college years. I believe we are as far removed from that as it is conceivable to be at the present moment."

One who reads Professor Sachs's defense of his position, in the Educational Review for January, 1906, and President Hadley's article, in the Century for April, 1905, may see what the real issue is. I think it may be fairly stated as the aristocratic vs. the democratic conception of all education in advance of the elementary school. Yale and Princeton, and the colleges that follow their lead, doubtless satisfy a real demand when they maintain a four-year college course, intact, for those whose tastes and circumstances enable them to take advantage of the opportunities offered. These institutions need make no concessions to the fitting schools on the one hand or to the professional schools on the other hand. There

are also many private schools, besides those presided over by Dr. Sachs, which find it to their advantage to satisfy the demand that they serve as fitting schools for such colleges. Were the colleges and secondary schools of the North Central States limited to institutions of this type, there would be nothing for this Association to do but to consider college entrance requirements.

But with the changing of the requirements for the bachelor's degree there has come about a change of conditions under which the degree may be obtained. It is no longer essential that all the work should be taken in the same institution. In order that the needs of our territory as a whole may be met it should be possible for one student to take a part of his college course in an advanced high school and the rest in a university; while another may be so situated that the small college with its preparatory department offers the needed opportunity. So varied are the conditions that prevail that varied agencies are needed if the best educational advantages are to be within reach of all our youth who aspire to a college training. The important question is not when or where the bachelor's degree should be given, nor indeed what it shall stand for. Titles and degrees as such have but little significance, and it may be just as well that such is the case. But it is important, to use the words of Dr. Elmer Brown, that "there be no *cul-de-sac* in the educational systems of the republic, but that instead every child, to the remotest district of our land, shall find the humble school of his neighborhood opening up into the higher schools, and so on up into the highest universities."

The Commission on Accredited Schools was or-

cago, Lake Forest College, Illinois College, Illinois Wesleyan University, University of Wisconsin, Beloit College, State University of Iowa, Cornell College, University of Missouri, and Washington University.

By Article III of the Constitution membership depends on nomination by the Executive Committee and election by the Association. Until the establishment of the Commission on Accredited Schools the Executive Committee accredited both colleges and schools. From the organization of the Association the Executive Committee has passed on applications of colleges for admission, refusing some and accepting others. In addition to the charter members the following colleges have applied for membership and have been accepted : Denison University, University of Cincinnati, Knox College, Iowa College, Drury College, Missouri Valley College, Westminster College, University of Nebraska, University of Kansas, University of Colorado, Colorado College, University of Oklahoma, University of Minnesota, Park College, Miami University, Ripon College, Milwaukee-Downer College, Lawrence University.

The following institutions have been represented by individual members: Case school of Applied Science, Purdue University, Rose Polytechnic Institute, Earlham College, Armour Institute of Technology, Eureka College.

Membership has lapsed in the case of the following colleges: DePauw University, Illinois College, Illinois Wesleyan University, University of Minnesota, Ripon College.

Our constitution says that no college or university shall be eligible to membership whose requirements

for admission represent less than fifteen units of secondary school work, as defined by the Commission on Accredited Schools, and that no college or university shall be eligible which confers the degree of Doctor of Philosophy or Doctor of Science except after a period of three years of graduate study.

What other qualifications are considered necessary for membership have not been set forth by the Executive Committee, and as the Committee changes from year to year it is not improbable that what have been considered essential qualifications have varied, and that colleges have been admitted to membership that are inferior to others that have been rejected.

It would also appear from President Thwing's report of last year that of the 35 colleges that are now members 11 do not require for admission 15 units of secondary school work and are not therefore eligible to membership. It may also be noted that of the 66 secondary schools that are members of the Association 24 are not on the list of Accredited Schools as published last year.

It would seem from these facts that this Association has done either not enough or too much in the way of accrediting colleges. I am aware of the fact that from the time of the preliminary meeting for organization until the present time there has been a decided difference of opinion on this question. It doubtless is "beset with serious difficulties." If, however, the Association serves the purpose for which it was organized, it must meet and overcome these difficulties.

I therefore propose that the act establishing the Commission on Accredited Schools be changed to read a "Commission on Accredited Schools and Col-

this work if it has been satisfactorily done in the secondary school. In the subject of English, then, four units are required for the bachelor's degree, three of which are usually taken in the secondary school and one in college.

The admission requirements in mathematics are two or three units and enough is required in college to amount to four units, but engineering schools, with the most advanced requirements for admission are coming to insist on what amounts to four units. A high school that meets the requirements of these engineering schools, has at the same time met the usual requirements for the bachelor's degree in mathematics, so that in this subject of the four units required for the bachelor's degree two may be given either in high school or in college.

In the sciences one year in physics is often required for admission, but nearly all the colleges in our territory will accept as many as four or five admission units in science and most of our first class high schools are now equipped to give instruction in the five units that are defined by the Commission. Elementary courses in science are given in all colleges for the benefit of students who entered without such instruction. We may say then that the three or four units in science usually studied by candidates for the bachelor's degree may be pursued in high school or in college.

The situation so far as history is concerned is almost identical with that in the sciences.

In foreign languages seventeen admission units have been defined by the Commission, four each in Latin, French and German, three in Greek, and two in Spanish. Six or seven of these units were until

recently required for admission to college, but now most of the colleges and universities in our Association require only two units in foreign language for admission, so that we may say that of the seven or eight units in foreign language usually studied by candidates for the bachelor's degree five or six may be taken in the high school or in college.

It appears then from these considerations that half the work now accepted for admission to college is duplicated in college and half the work required in college for the bachelor's degree is duplicated in the secondary school, or, what amounts to the same thing, half the combined school and college requirements for the bachelor's degree may be pursued, and, as a matter of fact, are now pursued either in school or in college. The usual college course is made up of about equal parts of studies appropriate to the secondary schools and of more advanced or professional subjects that should be offered only in the college or the university.

In considering the question before us, are we not agreed that, as an Association, our main business is to take such action as will be to the advantage of the young men and women who are attending these schools and colleges? That this action will in the long run be to the advantage of our country and of every school and college goes without saying. Failure to coöperate in fixing and in maintaining standards has led too often to an unseemly scramble for students, the most serious consequence of which has been that what is best for the students has been sacrificed to what seemed to be of advantage to the college. In the territory of this Association there are 263 high schools in cities having a population of over

8,000, and 193 colleges and universities, all except 12 of which have preparatory departments. Most of these colleges are in the smaller towns. Here is the basis of a system that should enable the aspiring youth of our land to "find the humble school of his neighborhood opening up into the higher schools, and so on up into the highest universities." And if it is true that the high schools in our larger towns are prepared to do at least half the college work as well as it is done in college or better, why should it be necessary for those who wish to carry their education beyond the 15 units required for admission to college to incur the expense of leaving home, which is often prohibitive, in order to make the most of themselves?

In recent years we have heard something of the peril of the small college. No class of our educational institutions has served a more useful purpose or now has a more important work to do than the small college. It is in peril if it makes the mistake of attempting to do what it is unable to do well and fails to recognize its opportunity and adjust itself to the demands of the present. The small colleges, with their preparatory departments, cannot reasonably expect to draw students from the better manned and equipped high schools of the larger towns, but the colleges may do for the smaller towns and their surrounding territory what the high schools of the cities do for their communities. The small college may continue to give the bachelor's degree to those students who choose such advanced work as the resources of the colleges make it possible for them to offer, but they should not make the mistake of trying to compete in the number of their departments and

the range of their work with the large universities. In most of our small colleges the curriculum should be limited to those subjects of study which in the past gave to the degree of A. B. its distinctive character. That there is still a demand for such instruction no one can deny.

In conclusion I maintain that our Commission should accredit colleges and universities as well as secondary schools for the following reasons:

1. Because the Commission cannot define units of college work so that secondary school students may receive college credit, without inspecting the colleges. If both schools and colleges are inspected, let both be accredited, the school for the benefit of the college, the college for the benefit of the school; but, what is most important, let school and college be inspected and accredited for the benefit of the students who pass from one to the other.

2. Because in the territory of this Association the better equipped high schools should be encouraged to do at least two years of college work, that their students may be brought to a stage of advancement that will fit them to enter institutions where they may specialize in advanced, professional, or technical work. There is certainly quite as much reason for inspecting the college work of such a high school as there is for inspecting the more elementary secondary school work; but it would not be reasonable to inspect and accredit the work of the last two years of a secondary school, that does two years of college work, and not inspect and accredit the first two years of a college doing the same work.

3. Colleges and universities should be accredited by the Commission because the time has come when

we ought to do systematically and consistently what we have done in a haphazard sort of way since the organization of the Association. The North Central Association of Colleges and Secondary Schools has been assumed to be from the first an Association of Accredited Schools and Colleges.

4. One half the work now done in secondary schools and colleges covers ground common to both classes of institutions. By defining courses of instruction and inspecting and accrediting institutions much waste and confusion may be prevented and the interests of students conserved. When all elementary courses in English, mathematics, science, history, and foreign languages are thus standardized, the student may pass from one institution to another at that stage in his advancement which is most to his advantage. We of this Association believe in the certificate system of admission to college. Is there any reason why the system should not be extended beyond the 15 units now commonly required? Why should the Commission accredit work done in high schools and pay no attention to the same work when done in college? The 193 colleges of our territory are not so superior to the 263 high schools in cities of over 8,000 inhabitants that they need no attention. But, confining ourselves to the members of this Association, it might be well for the colleges and universities, not only those with preparatory departments, but all, even the largest and strongest, to have the courses they offer in the same subjects and of the same grade that are taught in the secondary schools defined, inspected, and accredited.

The discussion was continued by Superintendent E. L. Coffeen, Marshalltown, Iowa, as follows:

THE INSPECTION AND ACCREDITING OF COLLEGES AND UNIVERSITIES.

SUPERINTENDENT E. L. COFFEEN, MARSHALLTOWN, IOWA.

As one approaches the discussion of this question it clearly presents itself in two forms. First, is it desirable to have a list of accredited universities and colleges as well as secondary schools? Secondly, what standard shall be the determining basis for the accrediting?

It certainly is very desirable that there should be an accrediting system of colleges and universities. If there is a list of such schools that require certain standards of work and that have passed the inspection of the board of such an association, it will be of great service to the people who are to send their boys and girls to colleges. The expert judgment of such a board will be very valuable. As one who has had to deal with secondary education during most of his experience as an educator, the speaker has often viewed with mingled feelings of contempt and of pity the estimates which people, who are sending their sons and daughters to college, place upon different educational institutions. In fact at times they are like a reed bending in whatever direction the strongest wind blows. They are people many times who have never been to college, who have a very vague idea as to what a college education means, and who do not realize the ideals and purposes of such an institution. They feel many times their helplessness in the matter and would like some guide or assistance by which to select the schools to which it would be best to entrust their sons and daughters. If a thoroughly organized society of accredited schools and

universities could gain the confidence of the people and would be organized on a fair and broad-minded basis, it would certainly be of great assistance to the college and university clientage.

Educators of the secondary schools are often at a loss to know what advice to give to parents or to young men and young women who come to them. They do not have the opportunity of visiting the various institutions, and they do not have the opportunity and time to look them up as to their standing. Such an association would certainly at such times be of great assistance to a superintendent or high school principal. It is believed that the judgment of an expert board whose expressed results would be consistent, fair and unprejudiced and uniform, would be of the same benefit that expert testimony is in other lines.

Such an association would certainly be an inspiration to the various colleges that would constitute the membership of such an institution. As it appears now there seems to be little responsibility to any one on the part of the instructors in any institution. A recent questionnaire sent out by the speaker reveals the fact that there is very little questioning of the character of the work done within the class rooms of many institutions. In fact, one college president expressed himself as feeling that he would be "snooping around" if he endeavored to visit any of the lectures in his institution. Another university president stated that it was an impossibility to supervise closely the class room work of any university. Several claimed that the heads of departments supervised the work. But when it came to the question of how close this supervision was exercised there was

shown to be a laxity in nearly all institutions. There is a feeling abroad in the land that professors and instructors in universities care more for their specialties than they do for their students. Just how far this is true I am free to say my questionaire failed to disclose. Yet there is a lurking feeling among many educators that courses of study are too frequently made up without taking into consideration the students that are to pursue them. A thorough system of accrediting universities and colleges, would, if a close system of inspection were exercised by a board consisting of representatives from colleges and secondary schools, do something to remedy these evils if they exist; or, if the evils are found not to exist, it would do something to put the college professor and the college instructor in his right light before his constituents.

There is no discounting the fact that the accrediting system in the west, through its methods of inspection, has been a great factor toward improving the high schools. In a like manner a thorough inspection of colleges that wish to belong to such an association would raise the standards of work in all lines. It would either eliminate from the college class certain "quack" colleges or else cause them to stir themselves to such a degree as to be able to enter the lists of fully recognized institutions. President Jordan says in regard to the system of accrediting colleges: "I should certainly welcome it. I was the first to suggest it to the teachers of California. A competent examination and report would do some of us much good." Another university president recently stated that: "Departments and even whole faculties easily become ossified. Unless prevented

they are apt to recruit themselves by inbreeding. Methods become antiquated, teaching stale, and the atmosphere soporific."

A good thorough inspection that would prevent these evils would certainly be a benefit to the one hundred and ninety-three colleges in the territory of the Central Association of Colleges and Secondary Schools. All classes of men whether they are in commercial or educational pursuits are revived from states of lethargy when they are compelled to reach a certain standard of efficiency or when their work is compared with that of others in a similar occupation. Human nature is the same in both cases.

The question upon what standards such an association would be organized is also a matter of very vital importance. First there would be a standard of scholarship on the part of the professors and instructors that are to do the teaching work in these institutions. I believe that that matter is sufficiently emphasized in all institutions at present. All of the leading universities and colleges are looking well to the degrees which the members of their faculties hold. They want them to be thorough, exact and alive as students.

But attention should be given to the moral character and the teaching ability of those who are to be put in charge of the students. We can reasonably believe that much attention is paid to the moral character of those who are placed in charge of the class rooms. And we believe that the ideals of the average college professor and instructor are very high. They are men who are looked up to as perhaps no other class of men. However, the teaching side is not always considered. Too often there is a lack

of knowledge of educational principles and even a disdain for them on their part for such knowledge. They frequently believe that any one having a special training in any subject can teach that subject. They lack the ability of getting in personal touch with their students. They simply scatter their seed broadcast and allow it to light in all sorts of places, not considering whether the soil is adapted to it or not. They too *infrequently* look at matters from the student's point of view. I believe that right here is the place where the greatest indictment can be laid at the doors of universities and colleges. There is no class of men with higher ideals, and more thoroughly consecrated to their work than the college professors of America. Their greatest lack consists in the fact that they are not sufficiently acquainted with the principles of education. It is a fact to be deplored that many college men deprecate the need of professional training and teaching. They are not familiar with the best methods of either college or secondary work or with the nature of the individuals to be taught. The college entrance requirements, which have been largely dictated by the college specialists are very good illustrations of this. The fact is that the high schools have become too much *collegized* or too much *Ph. D.-ized*. As was recently stated by a member of the "New York Schoolmasters' Association": "These college entrance requirements have been shaped by specialists whose interest has been in the subject rather than the student." Many of the college men do not understand high school or freshman students. John F. Woodhull in the March Educational Review gives a typical situation when he says: "The history of physics teaching in secondary

they are apt to recruit themselves by inbreeding. Methods become antiquated, teaching stale, and the atmosphere soporific."

A good thorough inspection that would prevent these evils would certainly be a benefit to the one hundred and ninety-three colleges in the territory of the Central Association of Colleges and Secondary Schools. All classes of men whether they are in commercial or educational pursuits are revived from states of lethargy when they are compelled to reach a certain standard of efficiency or when their work is compared with that of others in a similar occupation. Human nature is the same in both cases.

The question upon what standards such an association would be organized is also a matter of very vital importance. First there would be a standard of scholarship on the part of the professors and instructors that are to do the teaching work in these institutions. I believe that that matter is sufficiently emphasized in all institutions at present. All of the leading universities and colleges are looking well to the degrees which the members of their faculties hold. They want them to be thorough, exact and alive as students.

But attention should be given to the moral character and the teaching ability of those who are to be put in charge of the students. We can reasonably believe that much attention is paid to the moral character of those who are placed in charge of the class rooms. And we believe that the ideals of the average college professor and instructor are very high. They are men who are looked up to as perhaps no other class of men. However, the teaching side is not always considered. Too often there is a lack

of knowledge of educational principles and even a disdain for them on their part for such knowledge. They frequently believe that any one having a special training in any subject can teach that subject. They lack the ability of getting in personal touch with their students. They simply scatter their seed broadcast and allow it to light in all sorts of places, not considering whether the soil is adapted to it or not. They too *infrequently* look at matters from the student's point of view. I believe that right here is the place where the greatest indictment can be laid at the doors of universities and colleges. There is no class of men with higher ideals, and more thoroughly consecrated to their work than the college professors of America. Their greatest lack consists in the fact that they are not sufficiently acquainted with the principles of education. It is a fact to be deplored that many college men deprecate the need of professional training and teaching. They are not familiar with the best methods of either college or secondary work or with the nature of the individuals to be taught. The college entrance requirements, which have been largely dictated by the college specialists are very good illustrations of this. The fact is that the high schools have become too much *collegized* or too much *Ph. D.-ized*. As was recently stated by a member of the "New York Schoolmasters' Association": "These college entrance requirements have been shaped by specialists whose interest has been in the subject rather than the student." Many of the college men do not understand high school or freshman students. John F. Woodhull in the March Educational Review gives a typical situation when he says: "The history of physics teaching in secondary

schools for the last 25 years naturally divides itself into two periods. During the first 13 years of this period physics was taught without help or hindrance from the colleges, and it progressed against fearful odds until 24 per cent. of all secondary-school pupils were studying the subject;—during the last 12 years the colleges have dominated the physics teaching in the secondary schools through their syllabi interpreted and enforced by their examinations, and it has declined until the number of pupils in physics has been reduced to 10 per cent. Twelve years ago 24 per cent. of the students took it voluntarily; now a considerable portion of the 10 per cent. take it only by compulsion. * * * I have been collecting testimony for the past 18 years from persons all over the country who studied physics then, and I find that the general feeling is that it was both interesting and profitable. Such testimony has been steadily changing into adverse criticism of the physics teaching of the last 12 years.

"In recent years physics teaching in the colleges also has been growing more unsatisfactory to general students. It is becoming more and more deficient in both the humanitarian and the practical elements. It does little for general culture and less for common sense. It is good preparation for neither investigators nor engineers and least of all for the ordinary citizen. In recent times college men have set out to *know only one thing*, and have omitted to conquer a sufficient field of related knowledge to understand any one thing well enough to teach it. We have witnessed the attempt to force the worst features of college instruction upon the secondary schools and we have in many cases seen young men come directly

from such a régime of college physics to teach in our secondary schools. They confine themselves to that disjointed skeleton of dry bones, the forty quantitative experiments. They use them as simply isolated, detached mathematical problems. They make no logical connections. They know little of an articulate whole. They know nothing of the correlations of physics and chemistry with botany, zoölogy, physiology, geology, geography, and the like."

If more attention were paid to the pedagogical abilities of the college instructor, it would react upon their students who take up teaching and we would have more pedagogically prepared teachers in our high schools. The secondary schools would then have a better quality of teaching. In view of the importance of the teaching side of a college instructor's preparation, this feature of college work should be considered by any board of inspection that is instituted.

Besides the standards to be held up on the part of the instructor there is the standard of admission and graduation required of the student. Something like a uniform standard is necessary. Who is to set this standard? What principles are to govern it? After all is said and done I believe that it can be truthfully stated that the most potent factor for bringing secondary education to the doors of the American youth has been the college. Through their graduates who have gone out as instructors, and through the desire of the people to maintain schools that can be accredited by these institutions there has come a spirit abroad in cities, large and small, for the establishment of strong high schools at public expense. I would challenge any one to produce a

stronger factor in this matter. The colleges have been enabled to raise their standard and to do it justly. The high schools have been endeavoring strenuously to come up to the standard set by the colleges. The time has come, however, when there should be a limit as to the raising of requirements for entrance. Heretofore for various reasons the colleges have been the ones to set the standard. The secondary schools have taken very little part in the matter. But the time is now at hand when the secondary school interests together with the college should have some voice in the question as to what the requirements for general college entrance should be, and as to the methods of teaching to be used and the matter to be studied. They are the ones who are to work day in and day out with the students and who best know their capacity and capabilities. All are willing to grant deference to college people when they express judgments that come within their field of labor. At the present time are there not men engaged in secondary work whose testimony is as important in their line and should be considered and weighed with the same value as the college man's testimony? It comes back again to that old question as to the capacity of the student and to the taking of the student into consideration when we come into framing our courses of study.

The requirements for admission on the part of the college in this association should not be placed so high that it will preclude the *average* high school from being accredited, or from giving due attention to the students that do not go to college. There should be a swinging of the pendulum in the other direction. The college man through his exacting re-

quirements is today driving many of our students from the high school. He is driving many of our students from physics and chemistry classes. He is doing the same with reference to botany, biology, mathematics and other branches. He wants the high school to do some of the work which he should be doing. Of course if the time should come within the future when the secondary school could get the financial appropriations and the public sentiment back of them to support them in carrying on some of this college work it would be all well and good, but as public sentiment is in the central west at present and as the questions of taxation come up at various times, the colleges should yield to sociological considerations. When this standard is set the conditions of the average communities in which our high schools are situated should be taken into consideration. We realize that the colleges have high ideals and they constantly work to carry them out, but they should at the same time keep in touch with their constituents from whom they get their students.

The question of accepting work done in the high schools as part of the work leading to the bachelor's degree is beset with difficulties. Will the college man be willing to accept the high school methods and the high school matter to be studied in the different subjects? Will he wish to take from secondary education its distinctive character? Will he insist on college methods for those branches that are to be accepted for college work? If the college man will recognize real secondary methods in the high school and will recognize them in the freshman and sophomore years, such accrediting would receive the hearty sanction of most high school men; but if it means

stronger factor in this matter. The colleges have been enabled to raise their standard and to do it justly. The high schools have been endeavoring strenuously to come up to the standard set by the colleges. The time has come, however, when there should be a limit as to the raising of requirements for entrance. Heretofore for various reasons the colleges have been the ones to set the standard. The secondary schools have taken very little part in the matter. But the time is now at hand when the secondary school interests together with the college should have some voice in the question as to what the requirements for general college entrance should be, and as to the methods of teaching to be used and the matter to be studied. They are the ones who are to work day in and day out with the students and who best know their capacity and capabilities. All are willing to grant deference to college people when they express judgments that come within their field of labor. At the present time are there not men engaged in secondary work whose testimony is as important in their line and should be considered and weighed with the same value as the college man's testimony? It comes back again to that old question as to the capacity of the student and to the taking of the student into consideration when we come into framing our courses of study.

The requirements for admission on the part of the college in this association should not be placed so high that it will preclude the *average* high school from being accredited, or from giving due attention to the students that do not go to college. There should be a swinging of the pendulum in the other direction. The college man through his exacting re-

quirements is today driving many of our students from the high school. He is driving many of our students from physics and chemistry classes. He is doing the same with reference to botany, biology, mathematics and other branches. He wants the high school to do some of the work which he should be doing. Of course if the time should come within the future when the secondary school could get the financial appropriations and the public sentiment back of them to support them in carrying on some of this college work it would be all well and good, but as public sentiment is in the central west at present and as the questions of taxation come up at various times, the colleges should yield to sociological considerations. When this standard is set the conditions of the average communities in which our high schools are situated should be taken into consideration. We realize that the colleges have high ideals and they constantly work to carry them out, but they should at the same time keep in touch with their constituents from whom they get their students.

The question of accepting work done in the high schools as part of the work leading to the bachelor's degree is beset with difficulties. Will the college man be willing to accept the high school methods and the high school matter to be studied in the different subjects? Will he wish to take from secondary education its distinctive character? Will he insist on college methods for those branches that are to be accepted for college work? If the college man will recognize real secondary methods in the high school and will recognize them in the freshman and sophomore years, such accrediting would receive the hearty sanction of most high school men; but if it means

Snow, of Washington University; President John R. Kirk, of the State Normal School, Kirksville; Inspector William H. Johnson, of the University of Kansas; Inspector T. M. Hodgman, of the University of Nebraska; President James H. Baker, of the University of Colorado; State Superintendent M. M. Ramer, of South Dakota.

The following standing committees on definitions of units were submitted by the secretary, from the names presented by the Inspectors, in accordance with the action of the Commission one year ago.

ENGLISH.

- F. N. Scott (Chairman), Professor of Rhetoric, University of Michigan.
University of Michigan, A. B. 1884, A. M. 1888, Ph. D. 1889.
- J. V. Denney, Professor of English and Dean of the College of Arts, Philosophy, and Science, Ohio State University.
University of Michigan, A. B. 1885.
- J. W. McLane, Principal, Lincoln High School, Cleveland, Ohio.
Adelbert College, A. B. 1883, A. M. 1895.
- A. J. Volland, Principal, Central High School, Grand Rapids, Mich.
University of Michigan, A. B. 1876.
- T. A. Clark, Professor of Rhetoric and Dean of Undergraduates,
University of Illinois.
University of Illinois, B. L. 1890.
- R. N. Whiteford, Head of the Department of English, High School,
Peoria, Ill.
Wabash College, B. A. 1890, M. A. 1892, Ph. D. 1893.
- W. F. Webster, Principal East High School, Minneapolis, Minn.
University of Minnesota, A. B. 1886.
- H. M. Belden, Professor of English, University of Missouri.
Trinity (Hartford), A. B. 1888; Johns Hopkins University, Ph.
D. 1895.
- E. M. Hopkins, Professor of Rhetoric and English Language, Uni-
versity of Kansas.
Princeton University, A. B. 1888, Ph. D. 1894.
- Nettie E. Manley, Teacher of English, High School, Emporia,
Kansas.
University of Kansas, A. B. 1901.
- W. W. Stoner, Superintendent of City Schools, York, Nebraska.
Otterbein University (Ohio), A. B. 1893.
- F. G. Hubbard, Professor of the English Language, University of
Wisconsin.
Williams, A. B. 1880; Johns Hopkins, Ph. D. 1887.

- James Lawrence Lardner**, Head of Department of English and Oratory, Dakota Wesleyan University, Mitchell, S. D.
 Wabash College, Crawfordsville, Ind., B. S. 1896; Graduate School of Oratory, Northwestern University, 1900.
- W. L. Cochrane**, Superintendent of City Schools, Aberdeen, South Dakota.
 Kirksville State Normal School (Missouri), B. P. 1900.
- C. F. Ansley**, Professor of English, State University of Iowa.
 University of Nebraska, A. B. 1890.
- B. F. Kizer**, Director of English, Manual Training High School, Kansas City, Mo.
 Wittenberg College, Springfield, Ohio, A. B., A. M.
- V. L. Parrington**, Professor of English Literature, University of Oklahoma.
 Harvard University, A. B. 1893.

MATHEMATICS.

- C. E. Comstock** (Chairman), Professor of Mathematics, Bradley Polytechnic Institute, Peoria, Ill.
 Knox College, A. B. 1888, A. M. 1891.
- H. Hancock**, Professor of Mathematics, University of Cincinnati, Berlin University, Ph. D.; Paris, D. Sc.
- J. L. Markley**, Junior Professor of Mathematics, University of Michigan.
 Harvard College, A. B. 1885; Harvard University, A. M. 1887; Ph. D. 1889.
- A. Darnell**, Head of the Department of Mathematics, Central High School, Detroit, Mich.
 University of Michigan, Ph. B. 1898.
- H. E. Slaught**, Assistant Professor of Mathematics, University of Chicago.
 Colgate University, A. B. 1883, A. M. 1886; University of Chicago, Ph. D. 1898.
- J. F. Downey**, Professor of Mathematics and Dean of the College of Science, Literature and Arts, University of Minnesota.
 Hillsdale College, A. M. 1877; College of Pennsylvania, C. E. 1878.
- W. A. Bartlett**, Principal High School, Winona, Minn.
 Iowa State Normal (Cedar Falls), B. D. 1883; Iowa College, B. S. 1887, A. M. 1890.
- W. D. Wells**, Principal, High School, Davenport, Iowa.
 Iowa State College, B. Sc. 1883.
- E. R. Hedrick**, Professor of Mathematics, University of Missouri.
 University of Michigan, A. B. 1896; Harvard University, A. M. 1898; Goettingen, Ph. D. 1901.
- I. I. Cammack**, Principal Central High School, Kansas City, Mo.
 Earlham College, B. S. 1884.
- E. B. Skinner**, Assistant Professor of Mathematics, University of Wisconsin.
 Ohio University, A. B. 1888; University of Chicago, Ph. D. 1900.

- A. L. Candy, Associate Professor of Mathematics, University of Nebraska.
University of Kansas, A. B. 1892, A. M. 1893; University of Nebraska, Ph. D. 1898.
- A. R. Congdon, Teacher of Mathematics, Omaha High School.
University of Nebraska, B. Sc. 1899.
- H. B. Newson, Professor of Mathematics, University of Kansas.
Ohio Wesleyan University, B. S. 1888, A. M. 1891, Ph. D. 1891.
- A. M. Bogle, Teacher of Mathematics, Kansas City (Kansas), High School.
Muskingum College, A. B. 1880, A. M. 1883.
- G. W. Nash, President Northern Normal and Industrial School,
Aberdeen, South Dakota.
Yankton College, B. S., M. S.
- J. D. Harlor, Head of Department of Mathematics, East High School, Columbus, Ohio.
Ohio State University, B. A. 1895.
- S. W. Reaves, Professor of Mathematics, University of Oklahoma.
University of North Carolina, B. S. 1899; Cornell University, A. B. 1900.

HISTORY.

- J. A. James (Chairman), Professor of History, Northwestern University.
University of Wisconsin, B. L. 1888; Johns Hopkins University, Ph. D. 1893.
- H. E. Bourne, Professor of History, Western Reserve University.
Yale University, B. A. 1883, B. D. 1887.
- H. V. Hotchkiss, Superintendent of Public Schools, Akron, Ohio.
Allegheny College, A. B. 1884, A. M. 1887, Ph. D. 1896.
- W. Cook, Principal Saginaw High School, Michigan.
University of Michigan, A. M. 1886, Ph. D. 1887.
- H. V. Church, Principal J. Sterling Morton High School, Clyde, Illinois.
University of Chicago, Ph. B. 1894.
- D. C. Munro, Professor of European History, University of Wisconsin.
Brown University, A. M. 1890.
- W. M. West, Professor of History, University of Minnesota.
University of Minnesota, B. A. 1879, M. A. 1881.
- W. T. Couper, Teacher of History and Civics, East High School, Minneapolis, Minn.
Hamilton College, B. A. 1892, M. A. 1893, University of Minnesota, LL. B. 1905.
- H. H. Freer, Professor of Economics and Sociology, Cornell College, Mt. Vernon, Iowa.
Cornell College, A. B. 1880, A. M., 1883.
- W. R. Smith, Instructor in American History, Washington University, St. Louis, Mo.
Missouri Valley College, Ph. B. 1899; University of Chicago, Ph. M. 1901.

- N. W. Lamkin, Teacher of History, High School, Clinton, Mo.
- H. W. Caldwell, Professor of American History and Politics, University of Nebraska.
University of Nebraska, Ph. B. 1880, A. M. 1894.
- Manda J. Sundeau, Teacher of History, High School, Lincoln, Nebraska.
Nebraska University, B. A. 1898.
- W. C. Abbott, Professor of European History, University of Kansas.
Wabash College, A. B. 1892, A. M. 1893; Oxford University, B. Litt., 1897.
- C. H. Rhodes, Principal High School, Winfield, Kansas.
University of Kansas, A. M. 1905.
- W. W. Girton, Teacher of Civics, State Normal School, Madison, South Dakota.
- G. W. Kephard, Superintendent of Schools, Beresford, South Dakota.
South Dakota Agricultural College, B. Sc. 1902.
- J. S. Buchanan, Professor of History, University of Oklahoma.
Cumberland University, B. S.

LATIN AND GREEK.

- E. W. Coy (Chairman), Principal of Hughes High School, Cincinnati, Ohio.
Brown University, A. M. 1858; Princeton University, Ph. D. 1886.
- J. H. Drake, Junior Professor of Latin and Roman Languages, University of Michigan.
University of Michigan, A. B. 1885; Ph. D. 1900; LL. B. 1902.
- David Mackenzie, Principal of Central High School, Detroit, Michigan.
University of Michigan, A. M. 1881.
- W. R. Bridgman, Professor of Greek, Lake Forest College, Lake Forest, Ill.
Yale University, B. A. 1881; M. A. 1891; Main University, M. A. 1891.
- J. S. Brown, Superintendent of Township High School, Joliet, Ill.
Denison University, A. B. 1889; Blandaille College, A. M. 1891.
- M. A. Slaughter, Professor of Latin, University of Wisconsin.
De Pauw University, A. B. 1883; Johns Hopkins University, Ph. D. 1891.
- Nora Frye, Teacher of Latin, High School, Stillwater, Minn.
University of Minnesota, B. A. 1901.
- J. H. T. Main, President of Iowa College, Grinnell, Iowa.
Johns Hopkins University, Ph. D. 1892.
- L. M. McAfee, President of Park College, Parkville, Mo.
Park College, A. B. 1880, A. M. 1887; Knox College, LL. D. 1903.
- W. C. Gunnerson, Teacher of Latin and Greek, Yeatman High School, St. Louis, Mo.
Indiana University, A. B. 1898, A. M. 1899; University of Chicago, Ph. D. 1904.

- G. E. Barber, Professor of Roman History and Literature, University of Nebraska.
Hiram College, A. B. 1871, A. M. 1874.
- Grace I. Bridge, Head of the Department of Latin, High School, Lincoln, Nebraska.
University of Nebraska, A. B. 1895.
- W. J. Greer, Professor of Latin, Washburn College, Topeka, Kansas.
Miami University, A. B. 1889, A. M. 1893.
- R. R. Price, Superintendent of City Schools, Hutchinson, Kansas.
University of Kansas, A. B. 1897; Harvard University, A. B. 1900, A. M. 1901.
- A. Strachan, Superintendent of Schools and Principal of High School, Deadwood, South Dakota.
University of Rochester, A. B. 1880, A. M. 1882.
- Edward Rissman, Principal of the South Division High School, Milwaukee, Wisconsin.
University of Wisconsin, A. M.

GERMAN.

- Laurence Fossler (Chairman), Professor of Germanic Languages and Literatures, University of Nebraska.
University of Nebraska, A. M. 1889.
- W. W. Davies, Professor of German, Ohio Wesleyan University.
Ohio Wesleyan University, A. B. 1872; Drew Theological Seminary, B. D. 1874; University of Halle, M. A., Ph. D. 1878.
- A. Keifer, Teacher of German, High School, Piqua, Ohio.
- M. Winkler, Professor of German Language and Literature, University of Michigan.
Harvard University, A. B. 1889; University of Michigan, Ph. D. 1892.
- P. Huber, Superintendent of School, Saginaw, W. S., Michigan.
- P. O. Kern, Assistant Professor of Germanic Philology, University of Chicago.
University of Chicago, Ph. D. 1897.
- Jessie L. Jones, Assistant Professor of German, Lewis Institute, Chicago.
Doane College, A. B. 1884; University of Chicago, Ph. D. 1897.
- A. R. Hohlfeld, Professor of German, University of Wisconsin.
Leipzig, Ph. D., 1888.
- Elizabeth A. Waters, Principal High School, Fond du Lac, Wisconsin.
University of Wisconsin, B. S.
- Elida C. Kirchner, Teacher of German, Central High School, St. Louis, Mo.
Washington University, A. B. 1899; University of Missouri, M. A. 1902.
- Emilie S. Hamm, Teacher of German, High School, Beatrice, Nebraska.

- W. H. Carruth, Professor of German Language and Literature,
University of Kansas.
University of Kansas, A. B. 1880, A. M. 1889; Harvard University, Ph. D. 1893.
- Harriet Kemp, Teacher of German, High School, Junction City, Kansas.
Baker University, A. B. 1901.
- Elizabeth Reid, Instructor in German, Huron College, South Dakota.
Wooster University, Ph. B.
- Hermine R. König, Instructor in German, North Side High School, Minneapolis, Minn.
- J. B. Knoepfler, Professor of German, Iowa State Normal, Cedar Falls.

FRENCH AND SPANISH.

- B. L. Bowen (Chairman), Professor of Romance Languages, Ohio State University.
University of Rochester, A. B. 1881; Johns Hopkins University, Ph. D. 1888.
- A. Nonnez, Teacher of French, Walnut Hills High School, Cincinnati, Ohio.
Lycée of Bordeaux, Bachelier es lettres.
- J. R. Effinger, Assistant Professor of French, University of Michigan.
University of Michigan, Ph. D. 1898.
- T. E. Oliver, Professor of Romance Languages, University of Illinois.
Harvard University, A. B. 1893; Heidelberg, A. M., Ph. D. 1899.
- F. L. Smart, Principal of High School, Dubuque, Iowa.
Harvard University, A. B. 1896.
- C. W. Benton, Professor of French Language and Literature, University of Minnesota.
Yale University, B. A., M. A. 1874; Western University of Pennsylvania, Litt. D. 1897.
- R. Weeks, Professor of Romance Languages, University of Wisconsin.
Harvard University, A. B. 1890; A. M. 1891, Ph. D. 1897.
- Eugeine Galloo, Professor of Romance Languages and Literature, University of Kansas.
University of Michigan, B. L. 1892; University of Kansas, A. M. 1895.
- Marie Dehnst, Professor of German and French, Kingfisher College, Kingfisher, Oklahoma.

PHYSICS.

- C. R. Mann (Chairman), Assistant Professor of Physics, University of Chicago.
Columbia University, A. B. 1890, A. M. 1891; University of Berlin, Ph. D. 1895.

- A. D. Cole, Professor of Physics, Ohio State University.
Brown University, A. B. 1884, A. M. 1887.
- Seth Hayes, Principal of High School, Lancaster, Ohio.
Ohio State University, B. Sc. 1892.
- C. W. Greene, Professor of Physics, Albion College, Albion, Michigan.
University of Michigan, A. M. 1905; Michigan State Normal College, B. Pd. 1905.
- C. F. Adams, Head of Department of Science, Central High School, Detroit, Mich.
Amherst College, A. B. 1877, A. M. 1884.
- C. H. Smith, Teacher of Physics, Hyde Park High School, Chicago.
Cornell University, M. E. 1885.
- C. W. Treat, Professor of Physics, Lawrence University, Appleton, Wisconsin.
De Pauw University, Ph. B., 1890, A. M. 1893.
- H. L. Terry, State Inspector of High Schools, Madison, Wisconsin.
- F. S. Jones, Professor of Physics and Dean of the College of Engineering, University of Minnesota.
Yale University, A. B. 1884, A. M. 1890.
- E. F. Smith, Teacher of Physics, Humboldt High School, St. Paul, Minnesota.
University of Minnesota, B. L. 1894.
- K. E. Guthe, Professor of Physics, State University of Iowa.
University of Marburg, Ph. D. 1892.
- S. L. Thomas, Principal, High School, Council Bluffs, Iowa.
- O. M. Stewart, Professor of Physics, University of Missouri.
De Pauw University, Ph. B. 1892; Cornell University, Ph. D. 1897.
- F. H. Ayres, Head of Department of Science in Central High School, Kansas City, Mo.
- J. E. Almy, Assistant Professor of Physics, University of Nebraska.
University of Nebraska, B. Sc. 1896, A. M. 1897; University of Berlin, Ph. D. 1900.
- H. M. Garrett, Teacher of Science in High School, Beatrice, Nebraska.
University of Nebraska, A. B. 1902.
- H. I. Woods, Professor of Physics and Astronomy, Washburn College, Topeka, Kansas.
Lafayette College, A. B. 1895, A. M. 1898.
- A. J. Stout, Teacher of Science in High School, Topeka, Kansas.
- L. E. Akeley, Professor of Physics, University of South Dakota.
Rochester University, B. A. 1886, M. A. 1888.
- W. A. Thompson, Superintendent of Public Schools, Webster, South Dakota.
Indiana University, A. B. 1904.

PHYSICAL GEOGRAPHY.

- C. E. Peet (Chairman), Assistant Professor of Geology and Geography, Lewis Institute, Chicago.
University of Wisconsin, B. S. 1892.
- G. D. Hubbard, Assistant Professor of Geology, Ohio State University.
University of Illinois, B. S. 1896, M. S. 1898; Harvard University, A. M. 1901; Cornell University, Ph. D. 1905.
- A. F. Foerste, Teacher of Science, Steele High School, Dayton, Ohio.
Denison University, A. B. 1887; Harvard University, A. M., Ph. D. 1890.
- C. A. Jewell, Jr., Teacher of Science, Central High School, Grand Rapids, Mich.
Michigan Agricultural College, B. S.
- W. W. Atwood, Instructor in Physiography and Geology, University of Chicago.
University of Chicago, B. S. 1897, Ph. D. 1903.
- G. L. Collie, Professor of Geology and Dean, Beloit College, Beloit, Wis.
Beloit College, B. S.; Harvard University, Ph. D.
- C. E. Long, Principal, High School, Marinette, Wis.
University of Wisconsin, B. S. 1902.
- C. W. Hall, Professor of Geology and Mineralogy, University of Minnesota.
University of Minnesota, B. A. 1871, M. A. 1873.
- W. F. Kunze, Superintendent of Schools, Red Wing, Minn.
University of Minnesota, B. S. 1897.
- W. H. Norton, Professor of Geology, Cornell College, Mount Vernon, Iowa.
Cornell College, A. B. 1875, A. M. 1878.
- H. H. Savage, Superintendent of Schools, East Waterloo, Iowa.
University of Iowa, Ph. B.
- C. F. Marbut, Professor of Geology, University of Missouri.
University of Missouri, B. S. 1889; Harvard University, A. M. 1904.
- P. Graves, Teacher of Physical Geography and Geology, Central High School, Kansas City, Mo.
- G. F. Kay, Assistant Professor of Geology and Mineralogy, University of Kansas.
University of Toronto, A. B. 1900, A. M. 1902.
- W. L. Enfield, Teacher of Science, High School, Wichita, Kansas.
- E. C. Perisho, Professor of Geology of University of South Dakota, and State Geologist.
- G. E. Condra, Associate Professor of Geography and Economic Geology, University of Nebraska.
University of Nebraska, B. S. 1896; A. M. 1898; Ph. D. 1901.
Earlham College, B. S., M. A. 1890; University of Chicago, M. S. 1895.
- F. H. Hoff, Superintendent of Schools, Mitchell, South Dakota.
Ohio Northern University, A. B. 1891.

CHEMISTRY.

- H. E. Griffith (Chairman), Professor of Chemistry, Knox College, Galesburg, Ill.
Northwestern University, B. S. 1892.
- D. C. Rybolt, Principal of High School, Akron, Ohio.
Ohio Wesleyan University, A. B. 1893.
- D. Fall, Professor of Chemistry, Albion College, Albion, Mich.
University of Michigan, B. S. 1875, M. S. 1882; Albion College, Sc. D. 1890.
- W. L. Whitney, Teacher of Chemistry in High School, Saginaw, E. S. Michigan.
University of Michigan, Ph. B. 1894.
- W. A. Redenbaugh, Instructor in Chemistry, University of Illinois, Dartmouth College, B. S. 1893, Ph. D. 1897.
- G. F. Weida, Professor of Chemistry, Ripon College, Ripon, Wis.
University of Kansas, B. S. 1890; Johns Hopkins University, Ph. D. 1894.
- G. B. Frankforter, Dean of the School of Chemistry, University of Minnesota.
University of Nebraska, B. S. 1886, M. A. 1888; University of Berlin, Ph. D. 1893.
- W. S. Hendrixson, Professor of Chemistry, Iowa College, Grinnell, Iowa.
Harvard University, A. M. 1889, Ph. D. 1893.
- E. F. Coffeen, Superintendent of Schools, Marshalltown, Iowa.
Carleton College, B. L. 1893, M. L. 1898.
- H. Hale, Professor of Chemistry, Drury College, Springfield, Mo.
Emory College, A. B. 1899; University of Chicago, S. M. 1902.
- F. N. Peters, Teacher of Chemistry, Central High School, Kansas City, Mo.
University of Missouri, A. B. 1887, A. M. 1890; Illinois Wesleyan University, Ph. D. 1903.
- B. Dales, Associate Professor of Chemistry, University of Nebraska.
University of Nebraska, B. S. 1897, M. A. 1899; Cornell University, Ph. D. 1901.
- H. A. Senter, Head of Department of Chemistry, High School, Omaha, Nebraska.
University of Nebraska, B. Sc., 1893; Heidelberg, Ph. D. 1896.
- E. A. White, Teacher of Chemistry, High School, Kansas City, Kansas.
University of Kansas, A. B. 1904.
- Margaret V. Maguire, Teacher of Science, High School, Mitchell, South Dakota.
University of Nebraska, B. Sc. 1904.
- Hans W. Schmidt, Teacher of Chemistry and Electrical Engineering, Central High School, St. Paul, Minn.
- G. A. Clark, Professor of Chemistry and Physics, Yankton College, Yankton, S. D.
Hillsdale College, M. Ph. 1890.

G. L. Holter, Professor of Chemistry, Agricultural and Mechanical College, Stillwater, Oklahoma.
Pennsylvania State College, B. S., 1886.

BOTANY.

- C. MacMillan (Chairman), Professor of Botany, University of Minnesota.
University of Nebraska, A. B. 1885, A. M. 1886.
- F. C. Newcombe, Professor of Botany, University of Michigan.
Leipzig, Ph. D. 1893.
- L. Murbach, Head of Department of Biology, Central High School,
Detroit, Mich.
University of Michigan, Ph. B. 1889, B. S. 1890; Leipzig, Ph. D.
1894.
- C. R. Barnes, Professor of Plant Physiology, University of Chicago.
Hanover College, A. M., Ph. D. 1886.
- O. W. Caldwell, Professor of Botany, Eastern Illinois State Normal
School, Charleston, Ill.
Franklin College, B. S. 1894; University of Chicago, Ph. D. 1898.
- R. A. Harper, Professor of Botany, University of Wisconsin.
Bonn, Ph. D. 1896.
- A. H. Christman, Teacher of Science, Stout School of Domestic
Economy, Menomonie, Wis.
University of Wisconsin, B. S. 1903.
- M. F. Arey, Head of Department of Natural Science, Iowa State
Normal School, Cedar Falls, Ia.
Bowdoin, A. B. 1867, A. M. 1870.
- Mary I. Steele, Teacher of Biology, Central High School, Kansas
City, Mo.
University of Missouri, B. S. 1900, M. A. 1901.
- C. E. Bessey, Professor of Botany and Dean, University of Ne-
braska.
Michigan Agricultural College, B. Sc., M. Sc.; Iowa State Uni-
versity, Ph. D.; Grinnell College, LL. D.
- E. A. Bostrom, Teacher of Botany, High School, Lincoln, Nebraska.
University of Nebraska, A. B. 1902.
- Alberta Cory, Teacher of Botany, High School, Kansas City,
Kansas.
- C. S. Parmenter, Vice-President of Baker University, Baldwin,
Kansas.
Allegheny College, Ph. D.
- Eloise Butler, Teacher of Botany, South Side Hih School, Minne-
apolis, Minn.
- Margaret A. Thompson, Teacher of Botany, State Normal School,
Spearfish, S. Dakota.
State Normal School, Winona, Minn., 1886.
- M. F. Guyer, Professor of Biology, University of Cincinnati.
University of Chicago, B. S. 1894; University of Nebraska,
A. M. 1897; University of Chicago, Ph. D. 1900.

ZOOLOGY.

- J. Reighard (Chairman), Professor of Zoology, University of Michigan.
University of Michigan, Ph. B. 1882.
- C. J. Herrick, Professor of Zoology, Denison University, Granville, Ohio.
University of Cincinnati, B. S. 1891; Denison University, M. S. 1895; Columbia University, Ph. D. 1900.
- E. L. Moseley, Teacher of Science, High School, Sandusky, Ohio.
University of Michigan, A. M. 1885.
- W. A. Locy, Professor of Zoology, Northwestern University.
University of Michigan, B. S. 1881, M. S. 1884; University of Chicago, Ph. D. 1895.
- F. L. Charles, Instructor in Biology, Northern State Normal School, DeKalb, Ill.
Northwestern University, B. S. 1904, M. S. 1905.
- H. D. Densmore, Professor of Botany, Beloit College.
Beloit College, A. B. 1886, A. M.
- L. Atherton, Head of Department of Biology, High School, Oshkosh, Wis.
Albion College, B. S. 1895; University of Michigan, M. S. 1899.
- H. F. Nachtrieb, Professor of Animal Biology, University of Minnesota.
University of Minnesota, B. S. 1882.
- W. W. Norris, Professor of Zoology, Iowa College, Grinnel, Ia.
Iowa College, B. A. 1886.
- J. A. Anderson, Head of Department of Biology, High School,
Dubuque, Iowa.
Lake Forest College, A. B. 1897, A. M. 1898.
- L. E. Griffin, Professor of Biology, Missouri Valley College, Marshall, Mo.
Hamline College, B. A. 1895; Johns Hopkins University, Ph. D. 1900.
- J. W. Scott, Teacher of Biology, Westport High School, Kansas City, Mo.
University of Missouri, A. B. 1896, A. M. 1897; University of Chicago, Ph. D. 1904.
- Caroline E. Stringer, Head of Department of Biology, High School, Omaha, Nebraska.
University of Nebraska, B. Sc. 1902, A. M. 1904.
- J. M. Matheny, Superintendent of Schools, Flandreau, South Dakota.
University of Indiana, B. S. 1897, A. B. 1902.
- A. Pihlblad, Professor of Biology, Bethany College, Lindsborg, Kansas.
Bethany College, A. B. 1894, A. M. 1896; University of Chicago, M. D. 1899.

- C. E. Johnson, Teacher of Science, Sumner County High School,
Wellington, Kansas.
Kansas State Normal, B. P. 1895; Kansas State University,
A. M. 1898.
- C. P. Lommen, Professor of Biology, University of South Dakota,
Vermillion.
University of Minnesota, B. S. 1891.

COMMERCIAL SUBJECTS.

- E. V. Robinson (Chairman), Principal Central High School, St. Paul, Minn.
University of Michigan, A. B., A. M.; Leipzig, Ph. D.
- F. C. Hicks, Professor of Economics and Civics, University of Cincinnati.
University of Michigan, A. B. 1886, Ph. D. 1890.
- D. Kinley, Dean of Graduate School, Director of Courses in Commerce, Professor of Economics, University of Illinois.
Yale University, A. B. 1884; University of Wisconsin, Ph. D. 1893.
- H. E. Brown, Principal High School, Rock Island, Ill.
Iowa College, Ph. B. 1899.
- F. L. McVey, Professor of Political Economy, University of Minnesota.
Ohio Wesleyan University, A. B. 1893; York University, Ph. D. 1895.
- M. M. Beddall, Principal High School, Boone, Iowa.
University of Wisconsin, B. L. 1897.
- I. A. Loos, Professor of Political Economy, State University of Iowa.
Otterbein University, A. B. 1876, A. M. 1879; Penn College, D. C. L. 1898.
- M. S. Wildman, Assistant Professor of Economics, University of Missouri.
University of Chicago, Ph. D. 1904.
- P. B. S. Peters, Director of Business Course, Manual Training High School, Kansas City, Mo.
Kansas City Law School, LL. B. 1900.
- G. A. Gregory, Superintendent of Schools, Crete, Nebr.
Doane College, B. S. 1881.
- N. M. Graham, Principal High School, South Omaha, Nebr.
University of Nebraska, A. B.
- D. T. Walker, President, Watertown Commercial College, Watertown, South Dakota.

MANUAL TRAINING.

- C. M. Woodward (Chairman), Dean of School of Engineering and Architecture, Washington University, St. Louis.
Harvard University, A. B. 1860; Washington University, Ph. D. 1874, LL. D. 1905.

- T. K. Lewis, Assistant Professor of Architectural Drawing, Ohio State University.
Ohio State University, B. S. 1894.
- J. W. Carr, Superintendent of Instruction, Dayton, Ohio.
Indiana University, A. B. 1885, A. M. 1890.
- G. N. Carman, Director, Lewis Institute, Chicago, Ill.
University of Michigan, A. B. 1881.
- C. A. Bennett, Professor of Manual Arts, Bradley Polytechnic Institute, Peoria, Ill.
Worcester Polytechnic Institute, B. S.
- J. A. Phillips, Professor of Drawing, University of Illinois.
University of Illinois, B. S. 1893.
- J. J. Flather, Professor of Mechanical Engineering, University of Minnesota.
Yale University, Ph. B. 1885; Cornell University, M. M. E.
- G. F. Weitbrecht, Principal, Mechanic Arts High School, St. Paul, Minn.
Amherst College, A. B. 1874.
- A. C. Newell, Supervisor of Manual Training, West Des Moines, Iowa.
University of Michigan, B. S. in E. E., 1892.
- C. H. Bailey, Director of Manual Training, Iowa State Normal School, Cedar Falls, Ia.
Iowa State University, B. S. in C. E., 1895; Columbia University, B. S. 1903.
- C. R. Richards, Professor of Mechanical Engineering, University of Nebraska.
Purdue University, B. M. E., M. E. 1891; Cornell University, M. M. E. 1895.
- W. M. Davidson, Superintendent of Instruction, Omaha, Nebr.
University of Kansas, A. B.
- A. A. McDonald, Principal, High School, Sioux Falls, South Dakota.
Oberlin College, A. B. 1900.

The following resolution was presented by President Baker and adopted by the Commission:

That the Commission recommends the publishing each year by the Association of a corrected statement of the definitions of units and requests the colleges and universities represented in the Association to publish the definitions of units, corrected each year, for the use of the high schools of their respective states.

It was voted that chairmen from the committees

on definitions of units be named by the Secretary from the lists submitted by the Inspectors.

Professor C. R. Mann, of the University of Chicago, told the Commission of a concerted movement by various organizations of teachers of physics to prepare a satisfactory definition of the unit in physics.

Chairman Whitney, of the Board of Inspectors, presented to the Commission a printed report on Standards of Admission and Accredited Schools. (See pp. 124-129.) The report was adopted.

The following amendment to the rules for admission of accredited schools was recommended by the Board and adopted by the Commission:

Schools once on the accredited list shall be required to make a full report once in three years and a partial report yearly, giving data as to new teachers and other important changes.

The Commission adjourned to meet immediately after the adjournment of the Association.

The second meeting of the Commission was held Saturday, March 24, at 11:30 A. M.

Chairmen of the committees on definitions of units were chosen as follows:

English: F. N. Scott, University of Michigan.

Mathematics: C. E. Comstock, Bradley Polytechnic Institute.

History: J. A. James, Northwestern University.

Latin and Greek: E. W. Coy, Hughes High School, Cincinnati.

German: Laurence Fossler, University of Nebraska.

French and Spanish: B. L. Bowen, Ohio State University.

Physics: C. R. Mann, University of Chicago.

Chemistry: H. E. Griffeth, Knox College.

Physical Geography: C. E. Peet, Lewis Institute.

Botany: C. McMillan, University of Minnesota.

Zoölogy: Jacob Reighard, University of Michigan.

Manual Training: C. M. Woodward, Washington University.

Commercial Subjects: E. V. Robinson, Central High School, St. Paul.

Acting President Judson was chosen Chairman of the Commission, President Baker Vice-Chairman, and Director Carman, Secretary.

A committee, consisting of the Chairman, Vice-Chairman, and Secretary, was appointed to prepare and present to the Commission a plan for inspecting and accrediting colleges.

The report of the Board of Inspectors was presented by Professor A. S. Whitney, of the University of Michigan, Chairman of the Board, as follows:

REPORT OF THE BOARD OF INSPECTORS.

STANDARDS of ADMISSION.

The following constitute the standards of admission to the accredited list of the North Central Association of Colleges and Secondary Schools for the present year:

1. No school shall be accredited which does not require fifteen units, as defined by the Association for graduation.

2. The minimum scholastic attainment of all high school teachers shall be equivalent to gradu-

tion from a college belonging to the North Central Association of Colleges and Secondary Schools, including special training in the subjects they teach, although such requirements shall not be construed as retroactive.

3. The number of daily periods of class-room instruction given by any one teacher should not exceed five, each to extend over at least forty minutes in the clear. (While the Association advises five periods, the Board of Inspectors has rejected absolutely all schools having more than six recitation periods per day per teacher.)

4. The laboratory and library facilities shall be adequate to the needs of instruction in the subjects taught as outlined by the Association.

5. The efficiency of instruction, the acquired habits of thought and study, the general intellectual and moral tone of a school are paramount factors, and therefore only schools which rank well in these particulars, as evidenced by rigid, thorough-going, sympathetic inspection, shall be considered eligible for the list.

6. Wherever there is reasonable doubt concerning the efficiency of a school, the Association will accept that doubt as ground sufficient to justify rejection.

7. The Association has omitted for the present the consideration of all schools whose teaching force consists of fewer than five teachers exclusive of the Superintendent.

8. No school shall be considered unless the regular annual blank furnished for the purpose shall have been filled out and placed on file with the in-

spector. All hearsay evidence, no matter from what source, is rejected.

9. All schools whose records show an abnormal number of pupils per teacher, as based on average number belonging, even though they may technically meet all other requirements, are rejected. The Association recognizes thirty as a maximum.

10. The time for which schools are accredited shall be limited to one year, dating from the time of the adoption of the list by the Association.

11. The organ of communication between the accredited schools and the Secretary of the Commission for the purpose of distributing, collecting and filing the annual reports of such schools and for such other purposes as the Association may direct, is as follows:

a. In states having such an official, the Inspector of Schools appointed by the State University. b. In other states the Inspector of Schools appointed by state authority, or, if there be no such official, such person or persons as the Secretary of the Commission may select.

The above plan contemplates the making of but one annual report to the Commission by each school, said report to be made directly to the state authority and by him transmitted to the Secretary of the Commission for permanent filing.

The Association is very conservative, believing that such action will eventually work to the highest interests of the schools and the Association. It aims to accredit only those schools which possess organization, teaching force, standards of scholarship, equipment, esprit de corps, etc., of such character as will unhesitatingly commend them to any educator, College or University in the North Central territory.

ACCREDITED SCHOOLS.

COLORADO.

Canon City,
Durango,
Fort Collins,
Golden,
Grand Junction,
Greeley,
Idaho Springs,
Leadville,
Loveland,
Pueblo:
 Central,
 Dist. No. 1,
Trinidad,
Victor.

ILLINOIS.

Alton,
Aurora:
 East,
 West,
Belvidere, (South)
Bloomington,
Champaign,
Chicago:
 Austin,
 Calumet,
 Englewood,
 Hyde Park,
 Jefferson,
 John Marshall,
 Joseph Medill,
 Lake,
 Lake View,
 North West Div.; (Tuley),
 R. T. Crane (Man. Train'g),
 Robert A. Waller,
 South Chicago,
 Wendell Phillips,
 William McKinley,
Clyde (Morton Tp.),
Danville,
Decatur,
De Kalb Tp.,
Elgin,
Elgin Academy,
Evanston Tp.,
Freeport,
Harvey (Thornton Tp.),
Highland Park (Deerfield Tp.),
Joliet Tp.,
Kankakee,

Kewanee,
La Grange Tp.,
La Salle (Peru Tp.),
Moline,
New Trier Tp. (Kenilworth),
Normal,
Oak Park Tp.,
Ottawa Tp.,
Peoria,
Pontiac Tp.,
Princeton Tp.,
Quincy,
Rockford,
Rock Island,
Savanna Tp.,
Springfield,
Sterling Tp.,
Streator Tp.,
Waukegan.

INDIANA.

Elkhart,
Fort Wayne,
La Porte,
Richmond,
South Bend.

IOWA.

Boone,
Burlington,
Cedar Rapids,
Corning,
Council Bluffs,
Davenport,
Des Moines:
 East,
 North,
 West,
Dubuque,
Fort Dodge,
Grinnell,
Iowa City,
Keokuk,
Marshalltown,
Mason City,
Ottumwa,
Red Oak,
Sheldon,
Sioux City,
Washington,
Waterloo (East).

KANSAS.

Fort Scott,

Junction City,
Leavenworth,
Sumner Co. (Wellington),
Topeka,
Wichita,
Hutchinson,
Lawrence.

MICHIGAN.

Adrian,
Alpena,
Ann Arbor,
Battle Creek,
Bessemer,
Benton Harbor Col. Inst.,
Benton Harbor,
Calumet,
Charlotte,
Coldwater,
Delray,
Detroit:
 Central,
 Eastern,
 Western,
 Home and Day,
 University School,
Dowagiac,
Escanaba,
Ferris Institute,
Flint,
Grand Rapids Central,
Hancock,
Hastings,
Hillsdale,
Houghton,
Holland,
Iron Mountain,
Jackson,
Kalamazoo,
Lansing,
Lake Linden,
Manistee,
Marshall,
Marquette,
Mich. Military Academy,
Michigan Seminary,
Monroe,
Muskegon,
Negaunee,
Niles,
Owosso,
Pontiac,
Port Huron,
Saginaw, E. S.,
Saginaw, W. S.,
Sault Ste. Marie.

St. Joseph,
Traverse City,
Wyandotte.

MINNESOTA.

Albert Lea,
Anoka,
Austin,
Duluth,
Faribault,
Fergus Falls,
Hastings,
Little Falls,
Marshall,
Minneapolis:
 Central,
 East,
 North,
 South,
Owatonna,
Red Wing,
Rochester,
St. Cloud,
St. James,
St. Paul:
 Central,
 Cleveland,
 Humboldt,
Stillwater,
Winona.

MISSOURI.

Acad. Drury Col.,
Kansas City:
 Central,
 Manual Training
 Westport,
Kirkwood,
St. Louis:
 Central,
 McKinley,
 Mary Institute,
 Smith Academy,
 Wash. Univ. Man. Training,
St. Joseph,
Trenton,
Webster Groves.

NEBRASKA.

Beatrice,
Brownell Hall,
Hastings,
Lincoln Academy,
Lincoln,
Omaha.

SOUTH DAKOTA.

Deadwood,
Lead,
Mitchell,
Sioux Falls,
Watertown,
Yankton.

OHIO.

Akron,
Ashtabula,
Bellefontaine,
Bowling Green,
Canton,
Cincinnati :
Hughes,
Walnut Hills,
Woodward,
Cleveland :
Central,
East,
Glenville,
Lincoln,
South,
West,
Columbus :
Central,
East,
North,
South,
Delaware,
East Cleveland,
East Liverpool,
Elyria,
Fostoria.
Gallipolis,
Greenville,
Hamilton,
Lakewood,
Lima,
Mansfield,
Marietta,
Marion,
Middletown,
Mount Vernon,
Oberlin Academy,
Newark,
New Philadelphia,
Painesville,
Piqua,
Portsmouth,
Salem,
Sandusky,
Steubenville,
Toledo,

Troy,
Van Wert,
Warren,
Washington C. H.,
Xenia,
Youngstown.

WISCONSIN.

Antigo,
Appleton,
Ashland,
Baraboo,
Beaver Dam (Wayland Acad.),
Beloit,
Berlin,
Eau Claire,
Elkhorn,
Fond du Lac,
Fort Atkinson,
Grand Rapids,
Hudson,
Janesville,
Kenosha,
La Crosse,
Madison,
Manitowoc (North Side),
Marinette,
Marshfield,
Menomonie,
Merrill,
Milwaukee :
East Division,
South Division,
West Division,
Sem. Dept., Downer Col.,
Oshkosh,
Plymouth,
Racine,
Racine (Gram. School of Racine
College),
Ripon,
Sheboygan,
Superior :
Blaine,
Nelson Dewey,
Tomah,
Waukesha,
Waukesha (Carroll Col. Acad.),
Wausau,
Wauwatosa,
Whitewater.

It was moved by President Baker that the report of the Commission (including the report of the Board of Inspectors), and the recommendations and amendments proposed therein be adopted. The motion was adopted.

It was moved by Superintendent Nightingale (1) that the name of the Commission be changed to read, "The Commission on Accredited Schools and Colleges" and (2) that the Commission be requested to set in motion the machinery for the inspecting and accrediting of colleges. The question being divided, the first part of the motion, (1), was adopted. It was moved that the second part of the motion, (2), lie on the table. The motion was adopted.

It was moved by Professor Hicks that the Commission be instructed to report at the next annual meeting on the advisability of adopting a plan for the inspection of colleges and universities and the standardizing of their work. The motion was adopted.

Third Session Saturday Morning

The Association was called to order by the President at 10 o'clock A. M.

The question set for discussion was as follows: To what extent and by what methods should first-year students be supervised?

Professor Thomas Arkle Clark, Dean of Undergraduates, The University of Illinois, Urbana, opened the discussion with the following paper:

TO WHAT EXTENT AND BY WHAT METHODS SHOULD THE WORK OF FIRST YEAR MEN IN COLLEGES AND SECONDARY SCHOOLS BE SUPERVISED?

DEAN THOMAS ARKLE CLARK, UNIVERSITY OF ILLINOIS.

My experience in secondary school work has been so limited that I am afraid it hardly warrants any generalization in this paper on the supervision of the work of high school freshmen. Excepting for three years experience in an Academy, where the conditions were almost identical with those which exist in a small college, and an erratic connection with the board of education of my own little home city, I have had to do only with college men. Neither has my experience brought me much information with regard to the vagaries of young women, for in the University of Illinois the supervision of the work of the young women, although along the same general lines as that of the men, is with my full approval, I may say, in charge of a woman. My work is with the young men only, and my illustrations and conclusions will of

and nourished, and cared for. I almost invariably feel justified in advising against it. Responsibility and freedom of action are what the young student most need for their best development, and the constant supervision in the home robs them of the opportunity to get such training. An anxious mother of an only son said to me only last week that she seriously contemplated moving to Champaign in order to look after her boy. He was not properly fed. He was not doing his work according to her methods, and his stockings were in a dreadful condition. It is disagreeable and uncomfortable to have holes in one's stockings, but I tried to advise her that the necessity of thinking and acting for himself was worth more to her son at his age than carefully darned hose, and a varied selection of breakfast foods.

There are certain existing conditions, however, both with regard to the high school freshman, and the college freshman, which make a reasonable amount of supervision not only desirable, but absolutely necessary. The boy enters high school at an age the most critical of any in his life. His rapid physical development at this time often leaves him with little strength. New temptations come to him from all sides, and tendencies develop in him all sorts of nerve racking habits. He does not understand himself, and, worse than this, too often those at home, and those who look after his welfare in school, do not understand him any better. He is at an age when he wishes to do rather than to think where the easiest thing in the world is for him to learn bad methods of study, and to give his time to other things than his books.

The subjects which he is to take up are in me-

benefit and training which come from a college course come from the opportunity it gives the student to decide his own difficulties, to assume responsibility, and to manage his own time and money. I believe that it takes quite as much judgment for a student to spend money wisely that is sent him from home as to earn it for himself, and that there is quite as much, and quite as desirable training in the spending as in the earning of money. The average man who works his way through college does not use his freedom more wisely than does the man whose father foots the bills.

So far as the first year student can safely direct his own efforts, and can choose and plan, and act independently, it is better that he be allowed to do so. It is better even that at times he make mistakes, and go wrong than that all initiative should be taken away from him. It is not the making of mistakes, or the going wrong, that we so much deplore,—it is the fact that some who go wrong may never get right. I have in mind now a student who went sadly to pieces in his freshman year, but who learned from the experience the extent of his own weakness, and who has been a much stronger and a much better man than he would otherwise have been. The child learning to walk must often stumble, and he will have many a hard knock before he has learned completely to control his muscles. It is only by going alone that he, as well as his elder brother, gains strength and self-reliance.

Every year I am asked by mothers and fathers of prospective college students as to the advisability of their coming to college with their children, in order that the young people may be properly looked after,

and nourished, and cared for. I almost invariably feel justified in advising against it. Responsibility and freedom of action are what the young students most need for their best development, and the constant supervision in the home robs them of the opportunity to get such training. An anxious mother of an only son said to me only last week that she seriously contemplated moving to Champaign in order to look after her boy. He was not properly fed. He was not doing his work according to her methods, and his stockings were in a dreadful condition. It is disagreeable and uncomfortable to have holes in one's stockings, but I tried to advise her that the necessity of thinking and acting for himself was worth more to her son at his age than carefully darned hose, and a varied selection of breakfast foods.

There are certain existing conditions, however, both with regard to the high school freshman, and the college freshman, which make a reasonable amount of supervision not only desirable, but absolutely necessary. The boy enters high school at an age the most critical of any in his life. His rapid physical development at this time often leaves him with little strength. New temptations come to him from all sides, and tendencies develop in him to all sorts of nerve racking habits. He does not understand himself, and, worse than this, too often those at home, and those who look after his welfare at school, do not understand him any better. He is at an age when he wishes to do rather than to think, where the easiest thing in the world is for him to learn bad methods of study, and to give his time to other things than his books.

The subjects which he is to take up are in most

the fraternities which, beneficial as I believe them to be in the college community, are rather hard during the rushing season on the attractive freshman without a level head and a strong backbone. There is the athletic situation, including football, at whose door the newspapers and college faculties have piled quite as much evil as it seems to me the circumstances warrant. There are all of these things, and besides, we may as well face it openly, as every college freshman must, there is drinking, and gambling, and the scarlet woman, standing with open doors and open arms to rob him of his money and his honor. These very conditions, this very freedom, however, may be of the greatest value to him in the development of his character, or may lead him to ruin; and it is because of these conditions that I am of the opinion that intelligent supervision of the freshman's work is exceedingly desirable.

In the supervision of the work of the college freshman I do not think that he should be treated quite as a child. I feel strongly that he should be left free to choose for himself in most if not all of the things which come into his life. However free he seems to be left, some one should know, as far as it is possible to know, all about him,—where he lives, what his habits are, the men with whom he associates, the regularity of his attendance upon class, and the extent to which he is keeping up his work, and meeting the requirements laid down for him in the institution to which he belongs.

Some one may say with regard to this point that it is practically impossible for one man to know all about all of the students in a large institution. This may be more or less true where the student life is

perhaps further also that some one should care. Except in large cities, the opportunities for a careful and intelligent supervision, for a reasonable knowledge of the conditions under which the student must do his work, are more easily obtained by the high school teacher than by the teacher in college.

Notwithstanding the amount which we see in the newspapers, and the amount which we hear in all communities about college work and college life, the high school graduate comes to college with a very vague idea of what it all means, and of what will be expected of him. It is an annual experience, of which I have scores of illustrations, that the college freshman who fails, often does so because, as he says, he underestimated both the amount and the character of the work expected of him. He wakes up too late to the real situation.

The conditions under which the college freshman must live are not always conducive to study. In the average college in the Middle-West students are crowded together in small rooms, where they work, and play, and sleep in rather limited quarters. There is often a confusion which is not conducive to quiet thought and study. The fact that he is allowed absolutely to use his own time as he pleases is attractive. He may choose his own companions, form his own habits, employ his own time as he sees fit, and come and go at will. Unless he neglects his work completely, he will be allowed a good deal of liberty before he is called to account. Too often it is the incidents of college life,—the recreations, the distractions,—which appeal to him most strongly at first. There are, especially in coeducational institutions, social matters with all their allurements. There are

had had no opportunity, nor desire, to form bad habits. He had been under the restrictions of home and home surroundings. He had not gotten on as well in college as he had expected. His habits had grown careless. He had had some unexpected misfortune. He had been drunk the night before I saw him, and there had been other things worse. I talked it all over with him, and I feel sure that it will not happen with him again. He said to me, "I am sure I should not have done it if I had thought any one knew or would know. I supposed in this big institution, with its thousands of students, that a man was not under restrictions of any kind, that nobody would know what he was doing, and that nobody would care." It was like an electric shock to him to feel that somebody had really known all the time, and that somebody was likely to know in the future.

However good a mechanical system may be devised for supervising the work of students it will fail unless there is something more to it than a system. Rules may be formulated, and committees appointed, and the most complicated system devised, and nothing may come of it. A general knowledge of the students' situation is required, a warm sympathy with all student undertakings, an intelligent understanding of the student point of view. The one who is to supervise the work of students must have a good deal of information that he cannot talk about, and he must get it by knowing men, and by being among them. He must know many things about college life that are not public property. Above all he must have a reputation for being reasonable and fair, and a safe and sympathetic man in whom to

was a big, husky Irishman, and presented the situation to him. I said, "Either Brown must reform, or he must go home, and I think there is nobody who can help him quite as much as you." When he discovered how much I knew, he was willing to talk to me, and we went over the whole situation in a very friendly way. When I had finished, he said, "You call Brown in, and tell him what he has to do. Then you tell me what you have told him, and I'll see that he does it, or I'll lick him." I have every indication that Brown is reforming. He can very well stand out against college officers, and he can sometimes, without much difficulty deceive them, but when his own companions get after him, he must give in, or suffer the consequences.

The man who is to supervise the work of students will not be successful if he is a stay-at-home. He must be interested in all the things in which students find interest. If he finds time to sit on the bleachers for a few minutes and watch the practice; if he attends the mass meetings and contributes his share to the enthusiasm; if his face is seen among the crowd at the celebration of the victory; if he goes to a student smoker, or a class party, when he is invited, and he will be invited if he goes; he will have a much more intelligent knowledge of the students. He will know them under other conditions than those which exist in the class room. He will have a more intelligent knowledge of them as individuals, and he will be much better able to give them advice when he sees them sitting across the desk from him in his own office.

The college officer who would deal intelligently with the college freshman must be on terms of

pretty close friendship with students. If he insists that the student keep it always in mind that he is a professor, or a dean, he will not be of the greatest possible benefit in supervising the work of the young student. The man who has forgotten that he was ever young, or that he himself cut classes to see a ball game, will not make a good disciplinarian. It is worth a good deal to be able to sit down and talk with a student in a friendly way for half an hour; it is worth a good deal more to have him want to come in of his own accord and talk with you, whether he has much of importance to say or not.

In addition to this general knowledge of the individual student, which though difficult I believe is not beyond possibility in almost any institution in the United States, there are of course certain mechanical regulations which will help the college officer in the supervision of the student's work.

According to our own system at the University of Illinois, for which I have been partially responsible, all absences from class exercises, for whatever reason, are reported daily to my office. The record of these absences is kept upon cards prepared for the purpose. It is possible by this means to see to what extent a student is cutting his class exercises. When the absences of any member of the freshman or sophomore classes aggregate one-eighth of the whole number of recitations in the course, such students are dropped from that course. Juniors may be absent one-fifth of the total number of recitations, and no restrictions are placed upon the absences of seniors. This does not mean that a student is allowed to cut without having his attention called to the fact. He is warned at least once before he reaches his limit,

that the student knows that it is, that helps more than anything else to hold him to the right path.

I have myself been helped in keeping track of students more perhaps through my knowledge of University organizations than by any other one method. Practically every fraternity and club in the University has a regular committee appointed to look after the work of the freshman, and these have been very willing to co-operate with me in an attempt to know what the freshman and other students are doing, and to stimulate them to do their very best. I have come almost to the generalization that the only man in college whom it is almost impossible to get at, is the man who does not belong to anything. I have found the greatest help in the college organizations.

Any one who looks after the work of freshmen cannot afford to neglect the help of the individual student. I have made it the practice through all the years that I have had to do with college students never to ask a student anything about another man which would embarrass him in any way, or which he would hesitate to answer. Students will almost without exception tell all that is to be told about themselves. They seldom divulge, and ought not to be asked to do so, anything that is detrimental to the character of their comrades. I have, however, found the greatest help in looking after derelict students in the individuals with whom they were associated.

Less than a week ago I was almost at my wits end with regard to a certain young fellow who was going to the devil by the quickest route he could discover. There seemed no way left, excepting to send him home, and I was not yet quite willing to have this done. As a last resort, I called in his roommate, who

ecessary

we pre-
t mathe-
a poor

or shall
udy his
history
nd sym-
e of his
eakness,
students
ed, that
that he
m over-
tion of
can ad-
hall be
ll know
he head
of their

eted to
pecific
education
D. W.
op. 10
s. 100
P. 10
100. 100
100. 100



ducive to downright hard work, and so there is much time lost in the very beginning. He hasn't had a talk with his high school teachers since June, and their wholesome counsel has largely evaporated. Besides, in his present state of exaltation at seeing a college student in his looking-glass, these high school teachers are rather commonplace people, after all, and really deserve his sympathy, if not his pity. All this time the staid professor sits there awaiting the coming of this freshman to his class fully conscious of his power to flunk him at the midyear. This professor is busy with the final proofs of the book he has written for use in high schools, and has barely time for his recitations, much less for the consideration of a mere freshman, no matter how feverish he may be. The greatest need of the boy just here is a friend, one who has been over the ground and who sees both sides of the question. Out of hard work must issue his salvation, and he needs a friend to show him how to attack the problem which a college course is supposed to solve. He needs to get his bearings at once, to become oriented the first day, and to do this he needs guidance. Student organizations sometimes help in this matter, but, generally, these organizations cannot follow up the work long enough for the best results. The boy loses time in trying to interpret the schedule and in discovering the lair of the professor, and the fever increases instead of abating. Moreover, in his present state of bewilderment, he is sorely tempted to assert himself in some way that his identity may not be wholly swallowed up in the student mass. It is difficult for him to realize that he is now at the foot of the ladder again, seeing that during the whole of vacation he has been cherishing the memory

of commencement, with its flowers, congratulations, and be-ribboned diploma. The transition has been sudden and abrupt, and the process of readjustment is not easy. Instead of going in through the narrow and difficult door of hard work, he is tempted to effect an entrance by means more easy and direct. Herein lies one of his greatest dangers, and right here he needs wise counsel.

This mental condition renders him particularly susceptible and responsive to the attentions of fraternity men, who, in advance, had been apprised of his coming, of his good record in the high school, of the high social status of his family, and of many other items that invest him with a sort of halo. Then ensues a period of "rushing," with all that the term has come to imply in these latter days,—a regime that taxes the time and strength, and often jeopardizes the class standing of the strongest and most earnest student. But what is a boy to do? He argues that these are fine fellows, that they are veterans in the service, and know the ways of college far better than the recruit, and that they will do nothing to impede his progress in all that makes for scholarship. The attentions they lavish upon him must, he thinks, be an earnest of their friendship for him and interest in all that concerns him. All this is before taking. Later on he may find these same friends chiding him on the score of poor work—calling unpleasant attention to the frail superstructure he has built upon the foundation that they themselves helped to make weak. In athletics the same condition of affairs obtains. Everybody wants to win, of course, and here is the door through which the freshmen may enter into the promised land. A fifty-yard run with a touch-

dutive to downright hard work, and so there is much time lost in the very beginning. He hasn't had a talk with his high school teachers since June, and their wholesome counsel has largely evaporated. Besides, in his present state of exaltation at seeing a college student in his looking-glass, these high school teachers are rather commonplace people, after all, and really deserve his sympathy, if not his pity. All this time the staid professor sits there awaiting the coming of this freshman to his class fully conscious of his power to flunk him at the midyear. This professor is busy with the final proofs of the book he has written for use in high schools, and has barely time for his recitations, much less for the consideration of a mere freshman, no matter how feverish he may be. The greatest need of the boy just here is a friend, one who has been over the ground and who sees both sides of the question. Out of hard work must issue his salvation, and he needs a friend to show him how to attack the problem which a college course is supposed to solve. He needs to get his bearings at once, to become oriented the first day, and to do this he needs guidance. Student organizations sometimes help in this matter, but, generally, these organizations cannot follow up the work long enough for the best results. The boy loses time in trying to interpret the schedule and in discovering the lair of the professor, and the fever increases instead of abating. Moreover, in his present state of bewilderment, he is sorely tempted to assert himself in some way that his identity may not be wholly swallowed up in the student mass. It is difficult for him to realize that he is now at the foot of the ladder again, seeing that during the whole of vacation he has been cherishing the memory

of commencement, with its flowers, congratulations, and be-ribboned diploma. The transition has been sudden and abrupt, and the process of readjustment is not easy. Instead of going in through the narrow and difficult door of hard work, he is tempted to effect an entrance by means more easy and direct. Herein lies one of his greatest dangers, and right here he needs wise counsel.

This mental condition renders him particularly susceptible and responsive to the attentions of fraternity men, who, in advance, had been apprised of his coming, of his good record in the high school, of the high social status of his family, and of many other items that invest him with a sort of halo. Then ensues a period of "rushing," with all that the term has come to imply in these latter days,—a regime that taxes the time and strength, and often jeopardizes the class standing of the strongest and most earnest student. But what is a boy to do? He argues that these are fine fellows, that they are veterans in the service, and know the ways of college far better than the recruit, and that they will do nothing to impede his progress in all that makes for scholarship. The attentions they lavish upon him must, he thinks, be an earnest of their friendship for him and interest in all that concerns him. All this is before taking. Later on he may find these same friends chiding him on the score of poor work—calling unpleasant attention to the frail superstructure he has built upon the foundation that they themselves helped to make weak. In athletics the same condition of affairs obtains. Everybody wants to win, of course, and here is the door through which the freshmen may enter into the promised land. A fifty-yard run with a touch-

to give sufficient time to the students, so that the latter may still feel themselves responsible for choice of studies and for their own conduct, then the system is a success. If, on the other hand, persons assigned to this duty take upon themselves to direct students as to their choice of studies and conduct, or are unwilling to give the necessary time to the matter, then the system is a failure. In this, as in nearly every other matter relating to the government of students, the difficulty is to find the right kind of persons for advisers. An estimate that ninety per cent of the students in our educational institutions do not call for the administration of disciplinary measures would not be too high; the number who give trouble in the matter of discipline is relatively very small. One rule which has not commonly been adopted seems to me to be extremely important and desirable; a student who is habitually a bad influence, whether he has ever been caught in an overt act or not, should be immediately removed from an educational institution. In educational institutions men are selected for positions primarily because of their knowledge, secondarily because of their power to teach; I have never heard of a case in which a man was appointed to a position in a university primarily because of either his executive or disciplinary power. This being the case, it is not at all wonderful that the executive work of educational institutions is generally done in a very bad way, or that the disciplinary side is generally weak. In my opinion the man who does the most valuable work for any educational institution is the man who conducts successfully the disciplinary part.

cess of Freshmen is the fact that too many professors detach themselves from these students as persons. They know them as mere names. This is an advance, of course, over the penitentiary, which recognizes people by numbers only. There are professors who now do not know the faces of students who have been in their classes since last September. In one college a young woman went into classes and recited for her sister, and the ruse was not suspected by the professors. Small wonder, then, that the freshman comes to think that the professor and himself live in different worlds.

If the faculties of colleges were recruited from among high school teachers instead of Fellows, the freshmen would be the gainers. A head full of knowledge is good, and a long list of degrees looks well in print, but the freshman would profit by an exchange of some of these for a heart full of kindly interest. The man who piles up a barricade of degrees against the freshman is missing a fine opportunity to do a service to his kind. If he would but make a breach in this barricade, walk through the breach, and take the freshman by the hand, the glory of this act would so illumine the degrees that they would be transformed as by spring house-cleaning. The best polish for a degree is made by taking equal parts of the milk of human kindness and the oil of gladness. Our country has injected the virus of democracy into Cuba, Porto Rico and the Philippines, and we are now ready to do a like service for the colleges and universities, and thus complete the ascending climax.

The whole problem of supervision will thus be solved. The student will become a personality, and no longer a mere specimen for the laboratory. There

will be common interests between student and professor. When the professor descends from his hobby and walks in friendship beside the student, the student himself will cease to ride his "pony," and both will be the better for pedestrianism. The professor who knows the boys best, their work, their aspirations, their difficulties, their lives — this professor has least to say in disparagement of the high schools and the preparation they have given to these boys. If all the professors knew the boys better, they would have greater respect for them and for the schools that prepared them, and they would be in position to make their college work more effective for citizenship.

It is surely possible to arrange the boy's time so that all the elements of college life may perform their rightful functions. These can, assuredly, be so correlated that class work will have the major place in the scheme of activities, and the other matters have adequate consideration as secondary affairs. Of course, this needs wise management. Nor need we be greatly concerned just here with the doctrines of predestination, free will, and all the rest. These are old enough to care for themselves. The question need not be obscured either, by such terms as "paternalism," or "leading strings." These are aside from the main proposition, which is the boy himself.

It would seem to be quite possible for a professor to have under his supervision from fifteen to twenty-five students. He could meet these on the first day and go over the situation briefly, and with a kindly interest. He could get from them the data that he would need, their daily programs, their home and college addresses, and such other information as

might be desirable. Thus at the very outset these boys would feel responsible to some one in authority, and this responsibility would prove an anchor to them. This group could be brought together at stated times for conference and help, should help be needed. Thus the whole perspective of college life could be shown to the boy by one whom he knows to be his friend.

Princeton and Smith have begun this work, and, in every college may be found a professor here and there who is working at the problem; and wherever such a professor is found he is recognized as a leader of men, a man who has the confidence and esteem of the students, a man who inspires to good work and fidelity to right standards, and a man who is conspicuous in all college affairs. Nor will scholarship necessarily suffer by such a plan. The luster of the professor's degrees need not be dimmed by the process. Quite the contrary. Moreover, the students will emulate his example and yearn day by day to win for themselves a place in the great republic of scholars. And the college itself by such a course will proclaim to the world, "I am my brother's keeper."

The discussion was continued by Principal J. E. Armstrong, Englewood High School, Chicago; Principal E. L. Harris, Central High School, Cleveland, Ohio; Professor C. A. Waldo, Purdue University, La Fayette, Indiana; Principal W. A. Crusinberry, West High School, Des Moines, Iowa; Principal A. J. Volland, Central High School, Grand Rapids, Michigan; Principal W. S. J. Bryan, Central High School, St. Louis; Professor Marshall S. Snow, Dean of the College, Washington University; and Professor H. F. Fisk, Northwestern University.

PRINCIPAL ARMSTRONG:

I would like to hear from others in regard to the best methods of caring for first year high school pupils. Our problems are as difficult as those of the colleges and universities. In our large city schools we have about as many pupils in first year each year as we have in the three other years combined. What can be done to hold more of these in school? There are two things which I am convinced will materially help. I am trying them in my school with good results. One of these is an effort to bring about a closer relation between the home and the school. Many parents have so little a conception of high school work that they become dissatisfied before they understand the aim of secondary school work. They have followed their children through the elementary school and have become familiar with its working. When the children reach high school, everything is different. The pupils drop from the ranks of the select to those of the least important. They have many teachers who slowly become acquainted with them. Discipline seems loose, and too much responsibility seems to be placed upon the child. I have made it my practice to assemble the first year pupils the first day and to explain to them the difference in the schools. I compare the elementary school and its methods and training to their mothers and the high school to their fathers, showing the different kind of care exercised by each.

We have a Parents' Club which meets monthly. All parents are invited to attend. Each parent and each teacher wears a button with the owner's name plainly written on it. This makes it easy for parents to find teachers they wish to see and to be found by

teachers who wish to see them. A light lunch is served consisting of coffee and wafers. After this some topic of interest pertaining to school work or management is discussed informally. This brings about a spirit of coöperation and friendly interest.

My second plan for caring for the interests of pupils is a scheme we have been trying but a few weeks and thus far is working well. We have divided the February entering class into boys' classes and girls' classes. This division does not affect the seating of pupils nor any of the social relations. It simply means limited segregation. I believe there is a fundamental difference in the minds of boys and girls during early adolescence which we have ignored. I believe most of the benefits of coeducation in high schools comes from the social relations of the sexes instead of from identical instruction. Boys and girls grow at different rates and the girl matures more quickly. At fourteen she is two years more mature in mind and body, so that she begins high school with a more settled purpose and steady aim than the boy of the same age. The boy of fourteen needs more exercise and sleep and finds it more difficult to concentrate his attention. Add to this the fact that the girls outnumber the boys five to one and it will be seen that there is little chance for them in the mixed class. Then, as boys have a keener appreciation of practical affairs, no wonder they grow weary of school life and take to business not simply to make a living but because business offers the stimulus they crave for utility. By collecting these boys into one class and the girls into another we may study their mental traits and adapt our work better to the needs

of each. After we have differentiated the boys from the girls in their early teens, we may then safely turn their diverging paths into parallel paths and each will be the better prepared for the work for which nature intended them.

PRINCIPAL HARRIS:

The college people can hardly be said to have a monopoly on the teachers who are unsympathetic in their work. A short time ago I said to a teacher with me, a teacher of fine intellectual ability, that I wished it were possible to make a bargain with him — "I should much like to trade half of your head for half a heart." He asked me what I meant and I replied that I meant just what I said. It would make a splendid combination, and make him a successful teacher.

I have some hesitancy of speaking of the lack of supervision in the first years of college life. I shall relate one incident. Two or three years ago I was visiting an eastern college. There were several of our former students in attendance there. I found one of these young men who although in good health had not been in class for a month. He was simply cutting all the time. When I returned I told his father, who had not been notified, that he better bring his boy home. Some time later I received notice from the college that the young man had failed in everything, indicating that he was not prepared. I was not at all surprised. The boy was prepared and could have done the work but he was easily influenced. He needed a friend and the guidance of a sympathetic instructor.

I speak of my own experience in the first year of

a secondary school. There are 700 in the entering class this year. I divided them into divisions or groups of about 50, each group under the supervision of a teacher who has them in two of the major subjects and who looks after them in all subjects. This teacher advises and encourages those under his care, meets their parents, and brings to me any case where the work needs to be lightened or changed. At the end of the term the record of the pupil was sent to the parent and returned signed. Soon after that I met each one of these pupils with the record and the teacher of the group. A word of compliment was given to the good pupils, a word of encouragement to the struggling ones, and criticism to those needing it. The pupil was invited to tell his troubles. In many cases too much outside work or poor health was found to be the cause of failure. The work was then made lighter, that is, the course prolonged. This plan has worked well, but it does take time and strength.

If, as has been said, the boy's future depends on the first three months work then certainly let the attention be given to the individual; let there be less of the class room teaching and lecturing and more of the sympathetic guidance and advice. The colleges owe something to the parents whose boys they have accepted.

PROFESSOR WALDO:

The paper discusses in an able and interesting manner one of the most important features of our large and rapidly expanding educational institutions. It presents one method of dealing with it in a very satisfactory manner. The principal objection to it

is the obtrusive and therefore repellent machinery. The very prominence of the methods must in some measure impair their efficiency. The boy who loves his freedom is not charmed with the notion of a guardian however logical and wise the idea of a father-adviser may be and in any institution it will probably fall far short of universal favor and acceptance.

And yet for a young man in breaking home ties to be lost in the crowd at a great university is to him a serious misfortune and against the University where it occurs a serious charge. That this does not occur in the small institution is its greatest claim to consideration.

But the departmental method for the supervision of students in large institutions may be made to resemble closely the college method in its best phases, while the head of a large department deals with problems, so far as individual students are concerned, much the same as the president of the small college. To speak concretely, we deal at Purdue in the department of pure mathematics at all times with one thousand to eleven hundred students. For this work we have eleven active instructors, every one handling approximately one hundred men. Our classes in various courses are for two, three, four, and five hours a week and a class once organized continues for the year under one instructor. The maximum number in each class is set at twenty-five, the minimum at eighteen or twenty and it is seldom that these limits are overstepped in either direction. To secure a position on the staff a man must be a good, well-trained mathematician,—preferably, of course, an original worker,—and a good teacher. To be a good teacher

animated by the right spirit is absolutely necessary in order to hold a position on the force.

If we must choose as sometimes we must, we prefer a fine teacher and an average but sound mathematician to a brilliant mathematician and a poor teacher.

The department insists that the instructor shall do more than impart the lesson. He shall study his pupils; shall acquaint himself with their history from the records, shall make an individual and sympathetic study of the personality of every one of his students; shall know their strength and weakness, and find reasons for both; he shall make his students understand that they are watched and studied, that he is glad to answer reasonable questions, that he tries to relieve their troubles and to help them overcome their difficulties. He sets aside a portion of each day when they can consult him and he can advise and encourage them. In short he shall be teacher, leader, counselor and friend, and shall know his men so well that at any time he can give the head of the department a fairly accurate analysis of their social and intellectual qualities.

This element of work and attention directed to the individual does in the departments in a specific way nearly the same thing as that advocated in a more general way by the writer of the paper. It has the added advantage of being a natural, every day outgrowth of the relations of teacher and student without the introduction of more machinery. These are some of the ideals towards which we at Purdue are consciously working. Of our success in realizing them we make no claims but we invite investigation.

PRINCIPAL CRUSINBERRY:

While the papers read this morning have had reference wholly to the supervision of first year college students and not at all to high school students, yet there has been so much heart in the things said that there was much of good in the papers for the high school principal.

In our experience in the West High School, Des Moines, we are led to feel that the gap between the 8th and 9th grades is as great and as difficult to bridge as between the 12th grade and the first year in college.

My own work in this line has been with college freshmen until within the last six years, and I think I see the difficulties in both cases very clearly.

One plan for supervision of first year high school students which we have talked in our high school but have not yet put into execution, is to keep first year students in a separate building with separate and special supervision.

We reach our individual pupils through their first hour teachers, to whom the pupils' failure in any work is reported. The first hour teacher talks with the pupil and if there is no improvement, he is sent to the principal. Often these talks set the pupil right and he is saved. If not, the case is reported to his parents and their coöperation asked.

We have found large reward in reporting to parents the absence of all pupils who have been out more than three days.

In reporting these cases, we use both the telephone and the mails. In many instances, in talking to the mother over the phone, she is sure her boy is in school,

and the letter home brings surprised parents to the school.

The fraternities instead of being a help in supervision as in college, are on the contrary, a hindrance in the high school.

DEAN SNOW:

I am so heartily in accord with the general treatment which has been given to this subject by other speakers, and especially by Dean Clark, that I have very little to add to this discussion. It seems to me, however, that one or two points need to be further emphasized.

As the discussion at this stage naturally takes the shape of an experience meeting, perhaps I may be pardoned if I simply state what is the practice in the office of the Dean of the College in Washington University in regard to supervision of members of the Freshman Class. We realize that the first few weeks of the Freshman year are in reality the critical weeks of the year to one who has just come from the restrictions of the secondary school. It is one of our rules, in both the College and the School of Engineering and Architecture, that at the end of each period of four weeks after the beginning of the term, reports shall be made to the Deans which contain the record of scholarship for the preceding month. It is my custom to look over the College reports with very great care. The record of the first month is necessarily somewhat indefinite, but enough can be gained, even in the absence of a quiz or written work, to give to one who is accustomed to such things an idea of how the work is beginning.

If I find that in any subject or subjects the stu-

dent has a low record during the first month, as soon as possible I have him come to my office and talk the matter over. I try to find out whether this low record comes from indifference to the work, from a want of proper preparation, from idleness or neglect, or from any of many reasons for such failure.

What has been said about the difficulty of the freshman adjusting himself at once to the new surroundings and new conditions of college life is absolutely true. I find very often, as the result of such examination of the record of the first month's work, that the student seems not yet to have "found himself," as one may say. I am often reminded of that story of Kipling's of "the ship that found itself," and these freshmen are often during this first month floundering about in a sea of uncertainty, not knowing how to steer their course.

Whatever may be the reason for the low record which comes to my notice, the matter is discussed fully and frankly by me with the student. The official relation is forgotten as much as possible. The endeavor is made to have him understand that he is being advised and guided by a friend who is almost in the relation of an elder brother; that the purpose of this meeting is not so much for reproof as for guidance and for setting him on the right way.

It seems to me that it is exceedingly important that this matter should be attended to very early in the year. I think it is a misfortune for the student and for the institution to allow the freshman to go on until Thanksgiving or Christmas without any official notice being taken of his work, and without any friendly hand by him for guidance and support. It is my belief that many a youth is by this anticipation

of possible trouble guided safely into a reasonable course, instead of being later in the year turned out among the wreckage which comes from complete disaster.

At the end of the second month, if the report still continues unsatisfactory, further admonition and advice follow, and here I wish to mention a second point which seems to me to be of great importance. I believe that fairness and justice to the students and to the parents make it an obligation upon the University authorities to keep the parents thoroughly informed upon the work which is going on in the college. Especially is this true during these earlier weeks of the Freshman year. It is my custom, therefore, if at the end of two months the work is still unsatisfactory, to communicate with the father or mother and to ask for an interview. At this interview, I always lay the matter fully and frankly before the parent and endeavor to secure his coöperation. Sometimes such coöperation is difficult to obtain, not so much from the want of good will, as from the inability on the part of the father at this time in the boy's career to exert over him sufficient influence. In this case, the trouble goes farther back than anything over which the College can obtain control. Such coöperation may, nevertheless, be had in most cases, and at any rate, the Dean of the College is sure that in thus acting he has done his full duty, and he has made it easier for the boy, for the parent, and for himself. He has also by this course made any subsequent action that may have to be taken fully understood and received without demur.

I believe that a large majority of students, who without such care and supervision go to pieces dur-

dent has a low record during the first month, as soon as possible I have him come to my office and talk the matter over. I try to find out whether this low record comes from indifference to the work, from a want of proper preparation, from idleness or neglect, or from any of many reasons for such failure.

What has been said about the difficulty of the freshman adjusting himself at once to the new surroundings and new conditions of college life is absolutely true. I find very often, as the result of such examination of the record of the first month's work, that the student seems not yet to have "found himself," as one may say. I am often reminded of that story of Kipling's of "the ship that found itself," and these freshmen are often during this first month floundering about in a sea of uncertainty, not knowing how to steer their course.

Whatever may be the reason for the low record which comes to my notice, the matter is discussed fully and frankly by me with the student. The official relation is forgotten as much as possible. The endeavor is made to have him understand that he is being advised and guided by a friend who is almost in the relation of an elder brother; that the purpose of this meeting is not so much for reproof as for guidance and for setting him on the right way.

It seems to me that it is exceedingly important that this matter should be attended to very early in the year. I think it is a misfortune for the student and for the institution to allow the freshman to go on until Thanksgiving or Christmas without any official notice being taken of his work, and without any friendly hand by him for guidance and support. It is my belief that many a youth is by this anticipation

of possible trouble guided safely into a reasonable course, instead of being later in the year turned out among the wreckage which comes from complete disaster.

At the end of the second month, if the report still continues unsatisfactory, further admonition and advice follow, and here I wish to mention a second point which seems to me to be of great importance. I believe that fairness and justice to the students and to the parents make it an obligation upon the University authorities to keep the parents thoroughly informed upon the work which is going on in the college. Especially is this true during these earlier weeks of the Freshman year. It is my custom, therefore, if at the end of two months the work is still unsatisfactory, to communicate with the father or mother and to ask for an interview. At this interview, I always lay the matter fully and frankly before the parent and endeavor to secure his coöperation. Sometimes such coöperation is difficult to obtain, not so much from the want of good will, as from the inability on the part of the father at this time in the boy's career to exert over him sufficient influence. In this case, the trouble goes farther back than anything over which the College can obtain control. Such coöperation may, nevertheless, be had in most cases, and at any rate, the Dean of the College is sure that in thus acting he has done his full duty, and he has made it easier for the boy, for the parent, and for himself. He has also by this course made any subsequent action that may have to be taken fully understood and received without demur.

I believe that a large majority of students, who without such care and supervision go to pieces dur-

The committee on time and place of the next meeting reported as follows:

We recommend that the city of Chicago be selected as the place for the next meeting and that the date be the last Friday and Saturday of March, 1907, unless the Executive Committee find it important to change the time. We also recommend that the special place for holding the sessions in the city of Chicago be left to the judgment of the Executive Committee.

HENRY F. KING,
A. F. NIGHTINGALE,
GEORGE B. AITON.

On motion the report was adopted.

The Committee on Nominations recommended the election of the following officers for 1906-7.

FOR OFFICERS FOR THE YEAR 1906-07.

PRESIDENT:

Principal E. L. Harris,
Central High School, Cleveland.

SECRETARY:

Dean T. A. Clark,
University of Illinois.

TREASURER:

Principal J. E. Armstrong,
Englewood High School, Chicago.

VICE-PRESIDENTS:

WISCONSIN —

President R. C. Hughes,
Ripon College.

Principal Edw. Rissman,
South Division High School, Milwaukee.

MICHIGAN —

President E. E. Lancaster,
Olivet College.

Principal A. J. Volland,
Central High School, Grand Rapids.

OHIO —

President Herbert Welch,
Ohio Wesleyan University.

Principal W. M. Townsend,
Central High School, Columbus.

IOWA —

President H. M. Bell,
Drake University.

Principal S. L. Thomas,
Council Bluffs High School.

ILLINOIS —

Acting President H. P. Judson,
University of Chicago.

Principal H. V. Church,
Clyde High School.

MISSOURI —

President L. M. McAfee,
Park College.
Principal W. J. S. Bryan,
Central High School, St. Louis.

NEBRASKA —

Professor T. M. Hodgeman,
University of Nebraska.

INDIANA —

President W. L. Bryan,
Indiana University.
Reverend W. O. Maloney,
University of Notre Dame.

KANSAS —

Professor W. H. Johnson,
University of Kansas.
Principal W. A. Davidson,
Topeka High School.

MINNESOTA —

George B. Aiton,
State Inspector of High Schools.
Principal Farnsworth,
Cleveland High School, St. Paul.

COLORADO —

President J. H. Baker,
University of Colorado.
Principal W. H. Smiley,
Denver High School.

OKLAHOMA —

President David R. Boyd,
State University.
Supt. of Instruction L. W. Baxter,
Guthrie.

SOUTH DAKOTA —

State Supt. of Instruction M. M. Ramer,
Pierre.

—

MEMBERS OF EXECUTIVE COMMITTEE:

Principal F. L. Bliss, Detroit University School, Detroit.
Professor J. V. Denney, Ohio State University.
President E. J. James, University of Illinois.
Principal Geo. W. Benton, Shortridge High School, Indianapolis.
And the President, the Secretary and the Treasurer *ex-officio*.

On motion the report was adopted and the persons nominated were declared elected.

A vote of thanks was tendered to the retiring secretary and to the treasurer of the Association.

The President announced the appointment of the following as members of the Commission for 1906-1909: Acting President H. P. Judson, University of Chicago; Professor E. O. Holland, Indiana University; Superintendent A. F. Nightingale, Chicago; Principal Geo. W. Benton, Indianapolis.

Director Carman moved, in accordance with the resolution of the National Association of State Universities, quoted in President MacLean's address, that the North Central Association elect a delegate to the joint committee proposed in the resolution (see page — of this volume). The motion was adopted.

Acting President Judson nominated President Geo. E. MacLean as such delegate and, the question being put by the Secretary, President MacLean was declared elected.

President MacLean then introduced President-elect Harris.

On motion the Association adjourned.

J. V. DENNEY,
Secretary.

LIST OF MEMBERS.

INSTITUTIONS.

(c. m. means charter member.)

OHIO.

Ohio State University, c. m., Columbus, President W. O. Thompson.
Western Reserve University, c. m., Cleveland, President Chas. F. Thwing.
Oberlin College, c. m., Oberlin, President H. C. King.
Ohio Wesleyan University, c. m., Delaware, President Herbert Welsh.
Denison University, '99, Granville, President Emory W. Hunt.
University of Cincinnati, '99, Cincinnati, President C. W. Dabney.
Miami University, '04, Oxford, President Guy P. Benton.
Central High School, c. m., Cleveland, Principal Edward L. Harris.
Hughes High School, '96, Cincinnati, Principal E. W. Coy.
High School, '96, Toledo, Principal W. B. Guitteau.
Walnut Hills High School, '99, Cincinnati, Principal W. Taylor Harris.
Woodward High School, '99, Cincinnati, Principal Geo. W. Harper,
West High School, '00, Cleveland, Principal Theo. H. Johnston.
East High School, '02, Columbus, Principal F. B. Pearson.
University School, '02, Cleveland, Principal George D. Pettee.
South High School, '02, Cleveland, Principal G. A. Ruetenik.
Lincoln High School, '02, Cleveland, Principal J. W. McLane.
East High School, '02, Cleveland, Principal B. U. Rannels.
Rayen High School, '03, Youngstown, Principal W. L. Griswold.
North High School, '05, Columbus, Principal C. D. Everett.
Glenville High School, '06, Cleveland, Principal H. S. Cully.
Central High School, '06, Columbus, Principal W. M. Townsend.
South High School, '06, Columbus, Principal C. S. Barrett.

MICHIGAN.

University of Michigan, c. m., Ann Arbor, President Jas. B. Angell.
Albion College, c. m., Albion, President Samuel Dickie.
Central High School, c. m., Grand Rapids, Principal A. J. Volland.
Michigan Military Academy, c. m., Orchard Lake, Principal L. C. Hull.
High School, '95, Kalamazoo, Superintendent S. O. Hartwell.

East Side High School, '95, Saginaw, Superintendent E. C. War-riner.

Detroit University School, '00, Detroit, Principal Frederick L. Bliss.

Olivet College, '06, Olivet, President E. G. Lancaster.

Michigan Seminary, '06, Kalamazoo, President Gray.

High School, '06, Charlotte, Superintendent M. R. Parmelee.

INDIANA.

Indiana University, c. m., Bloomington, President W. L. Bryan.

Wabash College, c. m., Crawfordsville, President W. P. Kane.

High School, c. m., LaPorte, Superintendent J. W. Knight.

High School, '96, Fort Wayne, Principal C. F. Lane.

Girls' Classical School, '00, Indianapolis, Principal May W. Sewall.

High School, '01, LaFayette, Superintendent E. Ayers.

Howe School, '04, Lima, Rector T. H. McKenzie.

Shortridge High School, c. m., Indianapolis, Principal G. W. Benton.

University of Notre Dame, '06, President John Cavanaugh.

ILLINOIS.

University of Illinois, c. m., Champaign, President E. J. James.

University of Chicago, c. m., Chicago, President H. P. Judson.

Northwestern University, c. m., Evanston, President T. F. Holgate.

Lake Forest College, c. m., Lake Forest, President R. D. Harlan.

Knox College, '96, Galesburg, President Thomas McClelland.

High School, c. m., Evanston, Principal Henry L. Boltwood.

Evanston Academy of Northwestern University, c. m., Principal A. H. Wilde.

Morgan Park Academy, c. m., Morgan Park, Dean W. J. Chase.

Manual Training School, c. m., Chicago, Director H. H. Belfield.

Harvard School, c. m., Chicago, Principal John J. Schobinger.

High School, c. m., Peoria.

Lake Forest School, Lake Forest, Head Master J. C. Sloan.

West Division High School, '96, Chicago, Principal C. M. Clayberg.

Hyde Park High School, '95, Chicago, Principal C. W. French.

Lake View High School, '96, Chicago, Principal B. F. Buck.

Englewood High School, '96, Chicago, Principal J. E. Armstrong.

Ottawa Tp. High School, '96, Ottawa, Principal J. O. Leslie.

Lyons Tp. High School, '96, La Grange, Principal Cole.

Lewis Institute, '95, Chicago, Director G. N. Carman.

Streator Tp. High School, '97, Streator, Principal _____.

Bradley Polytechnic Institute, '97, Peoria, Director T. C. Burgess.

High School, '98, Elgin, Principal.

Lake High School, '99 Chicago Principal Edward F. Stearns.

Marshall High School, '99, Chicago, Principal Louis J. Block.

Kewanee High School, '04, Kewanee, Principal J. B. Cleveland.
LaSalle and Peru Tp. High School, '05, Principal T. J. McCormack.

East Side High School, '05, Aurora, Principal C. L. Phelps.

Township High School, '05, Joliet, Principal J. Stanley Brown.

J. Sterling Morton High School, '05, Clyde, Principal H. O. Church.

Township High School, '06, Sterling, Principal E. T. Austin.

Rockford College, '06, Rockford, President Julia Gulliver.

High School of the University of Chicago, '06, Principal W. B. Owen.

WISCONSIN.

University of Wisconsin, c. m., Madison, President Charles R. Van Hise.

Beloit College, c. m., Beloit, President Edward D. Eaton.

Ripon College, '04, President Richard C. Hughes.

Milwaukee-Downer College, '97, Milwaukee, President Ellen C. Sabin.

Milwaukee Academy, '97, Milwaukee, Principal J. H. Pratt.

Racine High School, '05, Racine, Principal E. W. Blackhurst.

West Division High School, '04, Milwaukee, Principal C. E. McLenegan.

North Division High School, '04, Milwaukee, Principal R. E. Krug.

Lawrence University, '05, Appleton, President Samuel Plantz.

South Division High School, '06, Milwaukee, Principal E. Rissman.

Wayland Academy, '06, Beaver Dam, Principal E. P. Brown.

MINNESOTA.

Humboldt High School, St. Paul, Principal H. S. Baker.

Central High School, '04, St. Paul, Principal E. V. Robinson.

Cleveland High School, St. Paul, Principal S. A. Farnsworth.

Carlton College, Northfield, President W. H. Sallmon.

IOWA.

State University of Iowa, c. m., Iowa City, President Geo. E. MacLean.

Cornell College, c. m., Mt. Vernon, President Wm. F. King.

State Normal School, c. m., Cedar Falls, President D. S. Wright.

Iowa College, '95, Grinnell, President J. H. T. Main.

Drake University, '06, Des Moines, President H. M. Ball.

High School, '06, Council Bluffs, Principal S. L. Thomas.

High School, '06, Dubuque, Principal F. L. Smart.

West High School, '06, Des Moines, Principal W. A. Crusinberry.

MISSOURI.

University of Missouri, c. m., Columbia, President Richard H. Jesse.
Washington University, c. m., St. Louis, Chancellor Winfield S. Chaplin.
Drury College, '98, Springfield, President Homer T. Fuller.
Missouri Valley College, '98, Marshall, President Wm. H. Black.
High School, '96, St. Louis, Principal W. J. S. Bryan.
Westminster College, '00, Fulton, President David R. Kerr.
Mexico High School, Mexico, Superintendent D. A. McMillan.
Manual Training High School, '00, Kansas City.
Mary Institute, '00, St. Louis, Principal E. H. Sears.
Kirkwood High School, '00, Kirkwood, Superintendent R. G. Kinkead.
Park College, '02, Parkville, President Lowell M. McAfee.
Academy of Drury College, '04, Springfield, Principal C. P. Howland.
Wm. McKinley High School, '05, St. Louis, Principal G. B. Morrison.

NEBRASKA.

University of Nebraska, '96, Lincoln, President E. Benj. Andrews.

KANSAS.

University of Kansas, '96, Lawrence, Chancellor Frank Strong.
Washburn College, '06, Topeka, President Norman Plass.

COLORADO.

University of Colorado, '96, Boulder, President Jas. H. Baker.
Colorado College, '96, Colorado Springs, President W. F. Slocum.
High School No. 1, '96, Denver, President Wm. H. Smiley.
The Miss Wolcott School, '06, Denver.

OKLAHOMA.

University of Oklahoma, '01, Norman, President David R. Boyd.

SOUTH DAKOTA.

High School, Yankton, Principal R. C. Shellenbarger.

INDIVIDUAL MEMBERS.

OHIO.

Charles S. Howe, '02, President of Case School of Applied Science,
Cleveland.
Jos. V. Denney, '03, Dean of the College of Arts, Philosophy and
Science, Ohio State University, Columbus.

W. W. Boyd, '03, High School Visitor, Ohio State University, Columbus.

D. R. Major, '04, Professor in Ohio State University, Columbus.

G. M. Jones, '05, Secretary of Oberlin College, Oberlin, Ohio.

F. C. Hicks, '06, Professor in The University of Cincinnati.

MICHIGAN.

Fred N. Scott, '98, Professor in the University of Michigan, Ann Arbor.

L. H. Jones, '95, President of the State Normal School, Ypsilanti.

A. S. Whitney, '03, High School Inspector, University of Michigan, Ann Arbor.

Delos Fall, '03, Superintendent of Public Instruction, Lansing.

INDIANA.

Clarence A. Waldo, '95, Professor in Purdue University, Lafayette.

Carl Leo Mees, '96, President of Rose Polytechnic, Terre Haute.

W. W. Parsons, '99, President of the State Normal School, Terre Haute.

T. F. Moran, '02, Professor in Purdue University, Lafayette.

E. O. Holland, '06, High School Inspector, Indiana University, Bloomington.

ILLINOIS.

S. A. Forbes, '95, Dean, University of Illinois, Champaign.

A. V. E. Young, '95, Professor in Northwestern University, Evanston.

Thomas C. Chamberlin, '95, Professor in the University of Chicago, Chicago.

Henry P. Judson, '85, Professor in the University of Chicago, Chicago.

Marion Talbot, '97, Dean of Women, University of Chicago, Chicago.

Wm. A. Greeson, '97, Dean of Lewis Institute, Chicago.

F. W. Gunsaulus, '96, President of Armour Institute, Chicago.

Thomas F. Holgate, '99, Professor in Northwestern University, Evanston.

J. A. James, '99, Professor in Northwestern University, Evanston.

Henry Crew, '99, Professor in Northwestern University, Evanston.

A. F. Nightingale, c. m., County Superintendent, 1997 Sheridan Road, Chicago.

R. E. Hieronymus, '03, President of Eureka College, Eureka.

H. A. Hollister, '03, High School Inspector, University of Illinois, Champaign.

E. G. Cooley, '04, Superintendent of Schools, Chicago.

H. F. Fisk, '05, Professor in Northwestern University, Evanston.

Geo. H. Locke, '05, Professor in the University of Chicago.

F. J. Miller, '06, High School Inspector, University of Chicago.
Nathaniel Butler, '06, Professor in the University of Chicago.
T. A. Clark, '06, Dean of Undergraduates, University of Illinois, Urbana.

WISCONSIN.

Edward A. Birge, '96, Professor in the University of Wisconsin, Madison.
M. V. O'Shea, '98, Professor in the University of Wisconsin, Madison.
A. W. Tressler, '03, High School Inspector, University of Wisconsin, Madison.
H. L. Terry, '06, State High School Inspector, Madison.
W. O. Carrier, '06, President of Carroll College, Waukesha.

MINNESOTA.

George B. Aiton, '97, State Inspector of High Schools, Minneapolis.

IOWA.

F. C. Ensign, '06, High School Inspector, State University, Iowa City.
Chas. E. Shelton, '06, President of Simpson College, Indianola.

MISSOURI.

F. Louis Soldan, '00, Superintendent of Schools, St. Louis.
John R. Kirk, '98, President of the State Normal School, Kirksville.
C. M. Woodward, '99, Professor in Washington University, St. Louis.
Ben Blewett, '03, Assistant Superintendent of Schools, St. Louis.
A. Ross Hill, '04, Dean of Teachers' College, University of Missouri, Columbia.
Joseph D. Elliff, '05, High School Inspector, University of Missouri, Columbia.

NEBRASKA.

J. W. Crabtree, '04, University of Nebraska, Lincoln.
T. Morey Hodgman, '06, High School Inspector, University of Nebraska.

KANSAS.

W. A. Davidson, '99, Superintendent of Schools, Topeka.
W. H. Johnson, '06, High School Inspector, University of Kansas, Lawrence.

SOUTH DAKOTA.

M. M. Ramer, '06, State Superintendent of Public Instruction, Pierre.

CONSTITUTION OF THE NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS.

**AS AMENDED AT THE NINTH ANNUAL MEETING,
MARCH 26, 1904.**

ARTICLE I.

NAME.

The name of this Association shall be the North Central Association of Colleges and Secondary Schools.

ARTICLE II.

OBJECT.

The object of the Association shall be to establish closer relations between the colleges and secondary schools of the North Central States.

ARTICLE III.

MEMBERSHIP.

Section 1.—The members of the Association shall consist of the following two classes: First, colleges and universities, and secondary schools. Secondly, individuals identified with educational work within the limits of the Association.

Sec. 2.—Election to membership shall require a two-thirds vote of the members present at any meeting, and shall be made only upon the nomination of the Executive Committee.

Sec. 3.—In the membership of the Association, the representation of higher and of secondary education shall be as nearly equal as possible.

Sec. 4.—An institutional member shall be represented at the meeting of the Association by its executive head, or by some one designated by him in credentials addressed to the Secretary.

Sec. 5.—No college or university shall be eligible to membership whose requirements for admission represent less than fifteen units of secondary work as defined by the Commission on Accredited Schools.

Sec. 6.—No college or university shall be eligible to membership which confers the degree of Doctor of Philosophy or Doctor

of Science except after a period of three years of graduate study, not less than two of which shall be years of resident study, one of which shall be at the institution conferring the degree.

Sec. 7.— No secondary school shall be eligible to membership which does not provide fifteen units of secondary work as defined by the Commission on Accredited Schools.

ARTICLE IV.

POWERS.

All the decisions of the Association bearing upon the policy and management of higher and secondary institutions are understood to be advisory in their character.

ARTICLE V.

OFFICERS AND COMMITTEES.

Section 1.— The officers of the Association shall be a President, two Vice-Presidents from each state represented in the Association, a Secretary, a Treasurer, and an Executive Committee consisting of the President, the Secretary, the Treasurer, and four other members elected by the Association.

Sec. 2.— The officers shall be chosen at the annual meeting for the term of one year, or until their successors are elected. The election shall be by ballot.

Sec. 3.— The Executive Committee shall have power to appoint committees for conference with other bodies, whenever in their judgment it may seem expedient.

Sec. 4.— In case an officer holding office as representative of an institutional member severs his connection with the institution represented, he shall at his discretion hold his office until the close of the next regular meeting of the Association.

Sec. 5.— The Executive Committee shall have authority to fill a vacancy in any office, the officer elected by the committee to hold office until the close of the next annual meeting.

ARTICLE VI.

DUTIES OF OFFICERS.

Section 1.— The President, or in his absence one of the Vice-Presidents selected by the Executive Committee, shall preside at the meetings of the Association and shall sign all orders upon the Treasurer.

Sec. 2.— The Secretary shall keep a record of the proceedings of the Association and attend to all necessary correspondence and printing.

Sec. 3.— The Treasurer shall collect and hold all moneys of the Association and pay out the same upon the written order of the President.

Sec. 4.— The Executive Committee shall make all nominations for membership in the Association, fix the time of all meetings not otherwise provided for, prepare programmes and act for the Association when it is not in session. All the acts of the Executive Committee shall be subject to the approval of the Association.

ARTICLE VII.

MEETINGS.

There shall be an annual meeting of the Association and such special meetings as the Association may appoint.

ARTICLE VIII. MEMBERSHIP FEE.

To meet expenses, an annual fee of \$10 shall be paid by each university, \$5 by each college and \$3 each by all other members, and each member shall have one vote.

ARTICLE IX.

QUORUM.

One-fourth of the members of the Association shall constitute a quorum.

ARTICLE X. AMENDMENTS.

This constitution may be amended by a three-fourths vote at any regular meeting, provided that a printed notice of the proposed amendment be sent to each member two weeks before said meeting.

REGISTRATION.

AITON, Geo. B., State Inspector, Minneapolis, Minn.
ALBERT, C. J., 378 Wabash Avenue, Chicago.
AMBROSE, Thomas, 521 Wabash Avenue, Chicago.
ARMSTRONG, J. E., Principal, Englewood High, Chicago.
AUSTIN, E. T., Principal, Tp. High, Sterling, Ill.
BACON, G. A., 378 Wabash Avenue, Chicago, Ill.
BAKER, James H., President University of Colorado, Boulder.
BARDWELL, C. M., Superintendent, Aurora, Ill.
BARRETT, C. S., Principal, South High, Columbus, Ohio.
BAXTER, L. W., State Superintendent, Guthrie, Okla.
BELFIELD, H. H., Principal, University High, Chicago, Ill.
BELL, H. M., President, Drake University, Des Moines, Ia.
BEMAN, W. W., Professor, University, Ann Arbor, Mich.
BENTON, E. J., Professor, Western Reserve, Cleveland, Ohio.
BENTON, Geo. W., Principal, Shortridge High, Indianapolis, Ind.
BETTS, Geo. H., Professor, Cornell College, Mt. Vernon, Ia.
BILLINGS, Frank, Dean, Rush Medical, Chicago.
BIRGE, Edw. A., Dean, University of Wisconsin, Madison.
BLISS, F. L., Principal, University School, Detroit, Mich.
BLOCK, L. J., Principal, Marshall High, Chicago, Ill.
BOYD, D. R., President, University, Norman, Oklahoma.
BOYD, W. W., Inspector, Ohio State University, Columbus.
BOYER, C. J., Chicago.
BRANDENBURG, W. A., Superintendent, Mason City, Iowa.
BROWN, H. E., Principal, Rock Island, Ill.
BRYAN, W. J. S., Principal, St. Louis, Mo.
BRYAN, Mrs. W. J. S., 3746 Windsor Place, St. Louis, Mo.
BURKE, R. H., Chicago.
BUSWELL, Clara L., High School, Polo, Ill.
CARMAN, G. N., Director, Lewis Institute, Chicago, Ill.
CARRIER, W. O., President, Carroll College, Waukesha, Wis.
CHAPLIN, W. S., President, Washington University, St. Louis, Mo
CHASE, W. J., Dean, Academy, Morgan Park, Ill.
CHURCH, H. V., High School, Berwyn, Ill.
CLARK, B. F., Steinway Hall, Chicago, Ill.
CLARK, T. A., Dean, University, Urbana, Ill.
CLEVINGER, C. H., University, Chicago, Ill.
COFFEEN, E. L., Superintendent, Marshalltown, Iowa.
COLLIE, G. L., Dean, Beloit College, Beloit, Wis.

CRUSINBERRY, W. A., Principal, Des Moines, Iowa.
DENNEY, J. V., Dean, Ohio State University, Columbus.
DORCAS, H. C., Professor, State University, Iowa City, Ia.
ENSIGN, F. C., Inspector, State University, Iowa City, Iowa.
FARNSWORTH, S. A., Principal, Cleveland High, St. Paul, Minn.
FISK, H. F., Professor, Northwestern University, Evanston, Ill.
GLASCOCK, H. G., Military Academy, Culver, Ind.
GRIFFIN, J. E., Central High, Grand Rapids, Mich.
GRIFFITH, H. E., Knox College, Galesburg, Ill.
HADDOCK, F. D., Superintendent, Polo, Ill.
HAMSHER, F., Principal, Academy, Urbana, Ill.
HARLAN, R. D., President, Lake Forest, Ill.
HARRIS, E. L., Principal, Cleveland, Ohio.
HARVEY, L. D., Stout Training Schools, Menomonie, Wis.
HAWKER, Lillian, Polo, Ill.
HICKS, F. C., Professor, University, Cincinnati, Ohio.
HINKLE, E. C., Elgin, Ill.
HODGMAN, T. M., Inspector, University, Lincoln, Neb.
HOLGATE, T. F., President, Northwestern University, Evanston, Ill.
HOLLAND E. O., Professor, University, Bloomington, Ind.
HOLLISTER, H. A., Inspector, University, Urbana, Ill.
HUBBARD, F. G., Professor, University, Madison, Wis.
HUGHES, R. C., President, Ripon College, Ripon, Wis.
JOHNSON, W. H., Inspector, University, Lawrence, Kansas.
JONES, G. M., Secretary, Oberlin College, Oberlin, Ohio.
JUDSON, H. P., Acting-President, University, Chicago, Ill.
KENAGA, Katharine, High School, Oak Park, Ill.
KERR, D. R., President, Westminster College, Fulton, Mo.
KING, H. C., President, Oberlin College, Oberlin, Ohio.
KING, W. F., President, Cornell College, Mt. Vernon, Ia.
KIRK, J. R., President, State Normal, Kirksville, Mo.
KRENERICK H. C., Morton High, Clyde, Ill.
LANCASTER, E. G., President, Olivet College, Olivet Mich.
LEE, L. B., Chicago, Ill.
LEWIS, E. H., Lewis Institute, Chicago, Ill.
MACLEAN, G. E., President, University, Iowa City, Ia.
MAIN, J. H. T., President, Iowa College, Grinnell.
MANN, C. R., University, Chicago, Ill.
McAfee, L. M., President, Park College, Parkville, Mo.
MOORE, Robert, Board of Education, St. Louis, Mo.
NADAL, T. W., Olivet College, Olivet, Mich.
NEEDHAM, J. G., Professor, Lake Forest College, Ill.
NEIGHBOUR, L. B., Dixon, Ill.
NIGHTINGALE, A. F., Co. Superintendent, Chicago, Ill.

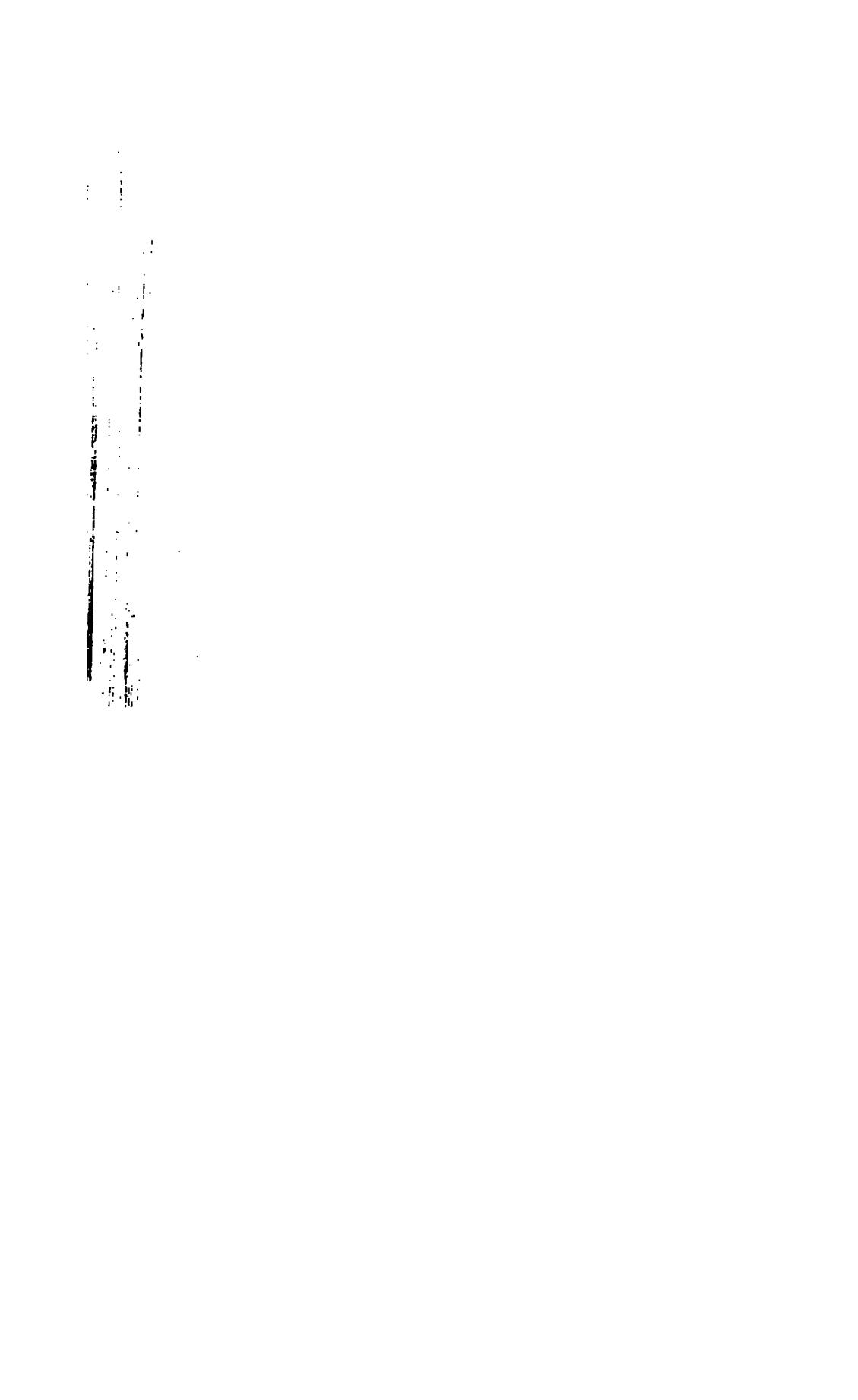
OWEN, W. B., Principal, High School, University, Chicago, Ill.
PERRIN, J. W., Librarian, Case Library, Cleveland, Ohio.
PHELPS, C. L., Principal East High School, Aurora, Ill.
PORTER Minnie E., High School, Oak Park, Ill.
PUTNAM, J. W., Northwestern University, Evanston, Ill.
RAGSDALE, G. T., Tp. High, DeKalb, Ill.
RAMER, M. M., State Superintendent, Pierre, S. D.
REDWAY, J. W., New York.
ROBERTS, J. W., 203 Michigan Avenue, Chicago, Ill.
SABIN, Ellen C., President, Milwaukee-Downer College, Milwaukee,
Wis.
SALLMON, W. H., President, Carleton College, Northfield, Minn.
SCOTT, E. H., 378 Wabash Avenue, Chicago, Ill.
SCOTT, F. W., Professor, University, Urbana, Ill.
SCOTT, F. N., Professor, University, Ann Arbor, Mich.
SCOTT, W. D., Professor, Northwestern University, Evanston, Ill.
SEERLEY, H. H., President, State Normal, Cedar Falls, Iowa.
SHELTON C. E., President, Simpson College, Indianola, Iowa.
SIMS, F. L., Principal, Tp. High School, Kenilworth, Ill.
SMART, F. L., Principal High School, Dubuque, Iowa.
SMITH, C. M., Editor, Hyde Park High, Chicago, Ill.
SNOW, M. S., Dean, Washington University, St. Louis, Mo.
SPENCER, Z. C., 203 Michigan Avenue, Chicago, Ill.
TALBERT, E. L., Principal, High School, Racine, Wis.
THWING, C. F., President, Western Reserve University, Cleveland,
Ohio.
TOWNSEND, W. M., Principal, Central High, Columbus, Ohio.
TRESSLER, A. W., Inspector, University, Madison, Wis.
TURTON C. M., South Chicago High, Chicago, Ill.
TWISS, G., Central High, Cleveland, Ohio.
VOLLAND, A. J., Principal, Central High, Grand Rapids, Mich.
WALDO, C. A., Professor, Purdue University, Lafayette, Ind.
WAY, R. B., Northwestern University, Evanston, Ill.
WEIDA, G. F., Ripon College, Ripon, Wis.
WELCH, Herbert, President, Ohio Wesleyan University, Delaware.
WESCOTT, O. S., Principal, Waller High, Chicago, Ill.
WHIPPLE, G. A., High School, Evanston, Ill.
WHIPPLE, H. A., Waterloo, Wis.
WHITE, Jennie P., Lansing, Mich.
WHITNEY, A. S., Professor, University, Ann Arbor, Mich.
WHITNEY, M. A., Superintendent, Elgin, Ill.
WOODWARD, C. M., Dean, Washington University, St. Louis, Mo.
WRIGHT, A. S., Case School, Cleveland, Ohio.
WRIGHT, H. C., Morton High School, Clyde, Ill.
YOUNG, A. V. E., Evanston, Ill.
ZAPFFE, Dr. J. F., Chicago, Ill.



- N. W. Lamkin, Teacher of History, High School, Clinton, Mo.
- H. W. Caldwell, Professor of American History and Politics, University of Nebraska.
University of Nebraska, Ph. B. 1880, A. M. 1894.
- Manda J. Sundeau, Teacher of History, High School, Lincoln, Nebraska.
Nebraska University, B. A. 1898.
- W. C. Abbott, Professor of European History, University of Kansas.
Wabash College, A. B. 1892, A. M. 1893; Oxford University, B. Litt., 1897.
- C. H. Rhodes, Principal High School, Winfield, Kansas.
University of Kansas, A. M. 1905.
- W. W. Girton, Teacher of Civics, State Normal School, Madison, South Dakota.
- G. W. Kephard, Superintendent of Schools, Beresford, South Dakota.
South Dakota Agricultural College, B. Sc. 1902.
- J. S. Buchanan, Professor of History, University of Oklahoma.
Cumberland University, B. S.

LATIN AND GREEK.

- E. W. Coy (Chairman), Principal of Hughes High School, Cincinnati, Ohio.
Brown University, A. M. 1858; Princeton University, Ph. D. 1886.
- J. H. Drake, Junior Professor of Latin and Roman Languages, University of Michigan.
University of Michigan, A. B. 1885; Ph. D. 1900; LL. B. 1902.
- David Mackenzie, Principal of Central High School, Detroit, Michigan.
University of Michigan, A. M. 1881.
- W. R. Bridgman, Professor of Greek, Lake Forest College, Lake Forest, Ill.
Yale University, B. A. 1881; M. A. 1891; Main University, M. A. 1891.
- J. S. Brown, Superintendent of Township High School, Joliet, Ill.
Denison University, A. B. 1889; Blandaille College, A. M. 1891.
- M. A. Slaughter, Professor of Latin, University of Wisconsin.
De Pauw University, A. B. 1883; Johns Hopkins University, Ph. D. 1891.
- Nora Frye, Teacher of Latin, High School, Stillwater, Minn.
University of Minnesota, B. A. 1901.
- J. H. T. Main, President of Iowa College, Grinnell, Iowa.
Johns Hopkins University, Ph. D. 1892.
- L. M. McAfee, President of Park College, Parkville, Mo.
Park College, A. B. 1880, A. M. 1887; Knox College, LL. D. 1903.
- W. C. Gunnerson, Teacher of Latin and Greek, Yeatman High School, St. Louis, Mo.
Indiana University, A. B. 1898, A. M. 1899; University of Chicago, Ph. D. 1904.



PROCEEDINGS
OF THE
TWELFTH ANNUAL MEETING
OF THE
NORTH CENTRAL ASSOCIATION
OF
COLLEGES AND SECONDARY SCHOOLS
HELD AT
Chicago, Illinois, March 29 and 30, 1907

EDITED BY
THOMAS ARKLE CLARK
SECRETARY OF THE ASSOCIATION

URBANA, ILLINOIS
PUBLISHED BY THE ASSOCIATION
1907

Copies of the Proceedings of the North Central Association of Colleges and Secondary Schools may be obtained by addressing the Treasurer of the Association, Mr. J. E. Armstrong, Englewood High School, Chicago. The price of single copies is twenty-five cents. The price of the complete set as far as published (thirteen numbers, including the report of the Preliminary Meeting for Organization) is \$3.00.

The next meeting of the Association will be held in Chicago, Friday and Saturday, March 27 and 28, 1908.

THE
North Central Association
OF
COLLEGES AND SECONDARY SCHOOLS.

Twelfth Annual Meeting, Chicago, March 29 and 30, 1907.

The twelfth annual meeting of the North Central Association of Colleges and Secondary Schools was held in Chicago, Friday and Saturday, March 29 and 30, 1907.

First Session Friday, March 29, 1907.

The Association was called to order at 10 o'clock, a. m. in the Banqueting Hall of the Auditorium Hotel by the President, Edward L. Harris of the Central High School, Cleveland, Ohio. President Harris delivered the annual address as follows:

**THE PUBLIC HIGH SCHOOL: ITS STATUS
AND PRESENT DEVELOPMENT.**

**EDWARD L. HARRIS, PRINCIPAL OF CENTRAL HIGH
SCHOOL, CLEVELAND, OHIO.**

The history of the development of the High School may well be divided into three periods, the first of which has been called by one writer, "The Colonial Period." Influenced by the thought and

system of the mother country, the first schools of this character were named Grammar Schools. Boston, in 1635, started her Latin Grammar School, afterward known as the Boston Latin School. In 1641, New Haven followed; in 1642, Hartford, and in 1659 New York established Grammar Schools. At about this time the well-known William Penn Charter School was founded in Philadelphia. Many other schools of like character were established in the colonies.

These schools were in no sense democratic. They had little or no connection with Elementary Schools. A tuition fee was usually charged; very little, if any, assistance, at first, was given from public taxation. These schools were for a class, largely for those who wished to enter professional life, and they were for boys only. They were preparatory schools, and the requirements of the colleges, at that time, influenced and dictated the course of study. It will be interesting to notice the requirements of Harvard, at the middle of the seventeenth century. "When scholars had so far profited at the Grammar Schools that they could read any classical author into English, and readily make and speak true Latin and write it in verse as well as in prose; and perfectly decline the paradigms of nouns and verbs in the Greek tongue, they were judged capable of admission in Harvard College." Many years later, the requirements for Princeton were, the ability "of composing grammatical Latin, translating Virgil, Cicero's Orations and the four Evangelists in Greek" and the understanding of the "principal rules of Vulgar Arithmetic."

The second period in the development of the High School may be called the First National Period, that is, from the adoption of our national constitution to about the middle of the nineteenth century. The influence of the state in educational matters had very much increased; while, on the other hand, the church was seeking to continue its hold on the educational work. This led to a separation of the two influences. It became the strongest period of the academy.

The Phillips' Academies, so well known during all the years since, were established in 1780-81. In 1784 the University of the State of New York was founded, and into its care was entrusted the entire college and secondary work of the state. In our own district—the North Central—in 1817, the territory of Michigan established its University and gave that institution power "to establish colleges, academies," etc., through the territory of Michigan. The character of the academies differed greatly from that of the grammar schools. They were not so distinctly for a class, for those seeking a profession, nor, in most cases, were they so nearly college preparatory schools. Their courses were broader, more enriched perhaps. Besides Latin and Greek, English, Elementary Science, and Modern Languages were introduced. They also became co-educational in many cases, although there were academies for boys, and at the same time there were also academies, or seminaries, for the girls.

During all this period the feeling for state control of secondary education was increasing. It finally came to a popular demand that the state assume such control; that the high schools be for

the people, and that the work of the high school be correlated with that of the elementary school. Boston was again among the first to act. In 1821 she started the English Classical School, afterward known as the English High School. It offered a three years course only, and was in no sense a college preparatory school. Philadelphia established its Central High School in 1838, Providence in 1842 and Cleveland its Central High in 1846. In the light of present experience it is amusing to note the following which I read recently in the early records of the last-named school, written by the first principal, in 1847: "Fourteen girls were admitted this term. They do not come up to the standard and I doubt the policy of admitting girls at all into this department."

The result of state control and state support was not accomplished at once or without a struggle from the opponents of the system. These schools were then doubtless considered as "frills and fads." It was claimed that the state had no right to expend the public money for the favored few; that the high schools were not common or public schools; that the only duty of the state was to the elementary schools; that the higher work should be left to the private academy. It was a conflict between the two influences that had been drawing apart during this period. The question was finally brought to a test before the Supreme Court of Michigan. The decision not only settled the case in that state but had a powerful influence on the other states, as the decision of such able jurists would have. The decision stated that, "Neither in our state policy, in our constitution, nor in our laws do

we find the primary school districts restricted in the branches of knowledge which their officers may cause to be taught, or the grade of instruction that may be given, if their voters consent, in regular form, to bear the expenses and raise the taxes for the purpose."

The advance made since this decision is seen in the enactments of the legislatures of some of the states, whereby a town or township, if it does not maintain a high school, must bear the expense of the tuition for any pupil who desires to attend at the nearest high school or at one he may select.

In this historical review of the development of the secondary school I am greatly indebted to the excellent monograph on Secondary Education in the United States, by Professor Elmer E. Brown.

The third period is the period of today. The public high school is distinctly an institution of the state; in no sense can it justly be considered a college preparatory school. Academies still exist; private schools and academies are still being founded, and their province is largely, it would seem to me, to prepare for college. They make a specialty of preparatory work. Formerly the high schools, when known as the grammar schools, were more closely associated with the college; today they are more closely associated with the elementary school. They are, perhaps, the connecting link in the state system of instruction between the elementary school and the State University, with the stronger attachment and duty towards the elementary school.

The people of the states of the North Central District have decidedly indicated their opinion of

this system in establishing strong state universities. Although these universities at first examined all applicants from high schools, they nevertheless were the first colleges in adopting the accrediting system. To the best of my knowledge, the University of Michigan was the originator of the accrediting system in Michigan as early as 1871. Michigan also has the honor of initiating in 1895 the movement for the formation of the North Central Association of Colleges and Secondary Schools—and thus indirectly of the accrediting system of the entire district. It is true that the New England Association had been formed in 1885 from the Secondary Association of Massachusetts; the Middle States and Maryland Association in 1892 on the suggestion of the College Association of Pennsylvania. Later in the same year, 1895, the Southern Association was formed. Much has been accomplished by these strong individual associations, but much more may be accomplished by united action.

The present status of the public High School is indicated by the history of its development. Its province, its duty, seems plain to your speaker. While I have made the statement that the High School is not a college preparatory school, I do not wish it understood that I believe that the student should not be prepared for college. On the contrary, I believe that every graduate of a first class high school should find an opportunity in some department of a higher institution, if he wishes to continue his studies. It has often been stated and accepted without question that, "Whatever best prepares one for college prepares him for life." If the converse were given and accepted, every student

would find such an opportunity; the manual student would find a place in the technical school, the commercial student a place in the commercial department of the state university. For a time there seemed to be, in this district, a definite purpose of separating the manual training students from the regular school and establishing special schools for them. The same was true of the commercial students. The tendency is now the other way, no doubt the result of experience. They are part of the regular high school in most cases, and courses are provided for them. Although our commission appointed a committee to report a definition of the work in Manual Training, no definition has as yet been given; no units are recommended in this subject for graduation from the high school and credits to the technical schools and scientific departments of the colleges. It is not my purpose to discuss the units of these subjects but to speak of them to assist in pointing out the line of duty of the High School of to-day.

Again, in many of the high schools not more than one-third of those who enter graduate. In the school with which I am most familiar, less than one-half of those who enter graduate, and of those who graduate about one-half enter higher institutions; that is, less than one-fourth of those who enter the high school enter the college or scientific school. This is another indication of the line of duty of the public high school.

The recommendation of the Committee of Ten, "That the instruction in any given subject shall not be different for a student preparing to enter a higher institution from that for the students who

go no further than the high school," is doubtless theoretically correct, but I challenge the statement under our present definitions. It is wholly impracticable. Wilson Farrand, in an admirable paper before the Schoolmasters' Association of New York and Vicinity, asks this question: "Are college entrance requirements too great in quantity?" His reply is: "I answer the question unhesitatingly in the affirmative." I, as unhesitatingly, endorse his answer.

There is no question in this district as to the number of units required for entrance to college. Fifteen units are not too many; but the size of the unit makes all the difference in the world. It makes some difference to the farmer selling produce whether he is to give fifteen pecks or fifteen bushels. Let us look for a moment at the measure in the "unit" of each of three or four subjects. In Algebra, the requirement is nominally unchanged, *i. e.*, through a certain topic, but examine any modern text and see how much has been inserted within a few years. The Graph is only one of the additional topics. In Geometry, one year should be sufficient, but again the new texts will show a fifty per cent increase and a large amount of original work. Valuable, yes, the most valuable part of the work perhaps. Where examinations are to be taken the range is at least seventy-five per cent broader than formerly. Take Physics, with its largely increased mathematical work. One eminent instructor said to me: "We are all up in the air in the subject, teachers and pupils." Some splendid work is being done changing the requirements in this subject, and I congratulate Professor Mann and his commit-

tee for what they have done in bringing the subject "down near the earth again." The maximum amount of Latin remains the same, but it is not possible to do justice to the amount required in four years with five recitations each week. Yes, it is possible by giving as much time to that as to all the other subjects combined. I have often found that to be the real situation. The statistics show a large increase in the number of those taking Latin in our secondary schools, but I do not remember that the statistics showed the number that had "fallen by the way;" showed how many had really completed the course. In the Modern Languages, there is too much given in both the minimum and maximum, especially in the former where there should be time for drill and growth.

Of course the pressure cannot be as great in the North Central district, under the accrediting system, as in the East under the College Board. I am thoroughly in sympathy with our system and hope that it may be extended in time, but the East does not take kindly to the accrediting system. I am not opposed to examinations conducted as they are by the College Board with a review by secondary men who are familiar with the age and conditions of the secondary student, providing the definitions be reduced to reasonable limitations and be the same as in the accrediting system.

For those high schools which are preparing students for the eastern colleges and consequently for examinations, the task is indeed a difficult one. I quote from Mr. Farrand's paper: "Fifteen points are required to enter Columbia. The entrance requirements of Princeton amount to something over

seventeen points. When a substitute for Greek is chosen at Yale they amount to seventeen points. Harvard demands of the students either seventeen or eighteen. I am inclined to think that eighteen is nearer the mark." To state it in another way he says: "To enter Cornell the student would have to pass fourteen points; to enter Columbia he would need another point; to enter Princeton or Yale he would have to add German or French, and if he goes to Harvard he will have to pile Physics onto the load. If students are to be prepared in our schools to enter such colleges as Yale, Princeton, Brown—and the same holds true of Smith and Vassar—the courses of these schools must cover at least sixteen points of work." He adds: "Is there any practicable remedy on which we can unite? There is one remedy and but one. That is to face the situation squarely, and to change the conditions."

To show to you the strong convictions of the secondary men of the East, I submit to you the report, or request, of the Schoolmasters' Association of New York and Vicinity to the College Entrance Board, submitted at its spring meeting:

Resolved, That in the judgment of this Association college entrance requirements are at present too great in quantity to secure the best quality of preparation.

Resolved, that the College Entrance Examination Board be requested to revise its requirements, by reducing the quantity in certain subjects. The particular modifications are:

(1) Elementary Algebra: The omission of the subjects beyond Quadratics.

(2) Plane Geometry: The preparation of a syllabus containing the essential propositions, and the restriction

of original work to exercises based upon those propositions.

(8) French and German: (Elementary and Intermediate). The revision of the lists of recommended books, and the reduction of the number of pages to be read.

(4) Physics: A reduction in the amount of mathematical work demanded.

(5) History: The restriction of questions requiring "comparison and the use of judgment on the pupil's part" to such as are commensurate with the maturity of secondary school students. The ending of the period of Ancient History with the Death of Diocletian (A.D. 805).

Resolved, that in the judgment of this Association fifteen points, as indicated on the attached scale, are all that may reasonably be required for admission by any college.

English	8	points
Algebra and Plane Geometry.....	8	"
Latin	4	"
Greek	3	"
Elementary French or German	2	"
Intermediate French or German.....	1	points
History (each field).....	1	"
Solid Geometry and Plane Trigonometry	1	"
Physics or Chemistry	1	"

This report was signed by seven of the strong men of the district among whom was Mr. Farrand and by whom it was presented to the College Board of which he is a member. The chairman ruled that the "Court had no jurisdiction." This has always been the position of the Board, namely, that the Board did not set the requirements but gave examinations on the requirements that had been established by responsible bodies or committees of specialists. It was finally voted by the Board to

appoint a committee from among its number to report a plan of action at the fall meeting.

This committee through its chairman, Mr. Farrand, reported three different plans. One plan suggested that there be constituted a standing committee of thirteen on the definition in each subject, five of this committee to be specialists and the remaining eight to be representatives of the colleges and secondary schools of the different sections of the country.

This plan was met by an objection from a representative of one of the colleges to the effect that secondary men should not be on such a committee; that the committee should be composed of learned men; that the secondary schools should accept the task set for them by the specialists. This seems a fatal mistake and shows a lack of understanding of the functions of the public high school. The specialists do not set the task for the high school; it is under the control of the state. If the same view were taken by all the colleges there could be but one result—the preparation for these colleges would necessarily be left wholly to the private preparatory school, while the high school would necessarily turn to its logical head, the state university.

I do not say that the high school can not do this work but rather that it *should not* in justice to the entire student body. It is the work, the touch, the life of the teacher that makes the student of character, and that teacher should be deeply interested in the course and should have time to accomplish the results for which his ideals call.

Our plea is not alone for the small minority who enter college, that they may present a better

quality of work rather than quantity, that they may in every way be better fitted to pursue the higher work to a successful issue, but for the hundreds who would doubtless enter college were they not crowded out in the rush, and for that other large part who do not intend to go further than the high school, but for whom the pace is set by the college part and for whom the race is too swift.

The College Board referred the report back to the committee, but it took action in a way that will have, doubtless, far reaching influences. It appointed a committee to review the entire college requirements upon which the Board bases examinations and to make a report to the Board as to what should be done. That committee is composed of four college men of whom Dean Hurlbut of Harvard is chairman, and three secondary men, one representative of the New England Association, one of the Middle States and Maryland, and one of the North Central Association. Of course the action of this committee cannot be anticipated, but should it recommend to the College Board a reduction of requirements in different subjects, who would make the changes? There is no established commission even of specialists on definitions. I fully believe that this is not the function of the College Entrance Examination Board, that is, the making of the "definitions"; that it should be left to some kind of permanent commission.

In conclusion the following recommendations are offered:

First, that our Commission of Accredited Schools instruct the Committees on Definitions that they have already appointed, to review the

definitions and limit the same in harmony with the recommendations of the Schoolmasters' Association of New York and Vicinity.

Second, that this Association ask the College Entrance Examination Board to establish, or to join with the North Central Association in establishing, a permanent commission on definitions in each subject of the secondary school, the Commission to be composed as follows: Three specialists from each of the associations of specialists and two from each of the four associations of colleges and secondary schools in the country; that is, the associations of specialists each be asked to appoint three members—for example, the Historical Association to appoint three members—and each of the four associations—the New England, the Middle States and Maryland, the North Central, and the Southern—be asked to appoint two from their own committees on definitions, one of whom at least shall be a secondary man.

Third, that all questions as to revisions of definitions at any time be referred to their respective commissions.

Fourth, that all students who come to the colleges of the North Central Association without certificates from the secondary schools, but who must take the examination of the college, be given the examination of the College Entrance Examination Board. With the harmony and unity of the definitions, this would be possible and the two systems would work together.

It was voted that the recommendations made in President Harris's paper be adopted.

The report of the Treasurer, Principal J. E. Armstrong, Englewood High School, Chicago, was presented as follows:

**REPORT OF THE TREASURER OF THE ASSOCIATION FOR THE YEAR ENDING
MARCH 29, 1907.**

RECEIPTS.

Cash on hand at date of last report.....	\$145.50
From the sale of reports and blanks.....	39.95
From eighty-one \$3 memberships.....	243.00
From seventeen \$5 memberships.....	85.00
From eighteen \$10 memberships.....	180.00
Total.....	<u>\$693.45</u>

DISBURSEMENTS.

Printing.....	\$291.29
Expenses of committees.....	151.40
Express	2.00
Postage (and exchange).....	2.20
Total.....	<u>\$446.89</u>
Cash on hand.....	<u>\$246.56</u> <u>\$693.45</u>

**J. E. ARMSTRONG,
TREASURER.**

March 29, 1907.

The Executive Committee recommended the following institution and individuals for membership in the Association:

FOR INSTITUTIONAL MEMBERS.

The East Division High School, Milwaukee, Wisconsin.

FOR INDIVIDUAL MEMBERS.

E. J. Townsend, Professor of Mathematics, University of Illinois.

A. A. Reed, High School Inspector, University of Nebraska.

C. E. Swanson, Superintendent of Public Instruction, Pierre, South Dakota.

H. G. J. Coleman, High School Inspector, University of Colorado.

F. W. Ballou, High School Inspector, University of Cincinnati.

Walter Libby, High School Inspector, Northwestern University.

Webster Merrifield, President of University of North Dakota.

On motion, the recommendations of the Committee were adopted, and the institution and individuals named above were elected to membership in the Association.

The Committee also presented the following amendments to the Constitution:

1. That Article 3, Section 3, be stricken out
2. That the following section be added:

If the dues of any member shall remain unpaid for a period of two years, such membership in the Association shall lapse.

On account of the fact that the number of secondary school memberships is in excess of the members from higher institutions, it was decided that no more secondary schools shall be elected, at least until the Constitution shall be changed. The amendments, in accordance with the Constitution, were laid on the table for one year.

*The Committee named Professor A. S. Whitney of the University of Michigan as delegate from the Association to the Williamstown Conference.

Professor J. V. Denney was then called upon by the President to explain the action of the Executive Committee. He spoke as follows:

Although the amendment cannot be voted upon before the next regular meeting of the Association, it seems desirable at this time, to make known the reasons which impel the Executive Committee to introduce this amendment.

The membership of the Association is at present about equally divided between representatives of secondary education and representatives of higher

*Professor Whitney later declined this appointment, and the President named Principal F. L. Bliss to take his place.

education. Very few colleges that are eligible to membership now remain outside of the North Central Association; but there are at least two hundred eligible secondary schools in north central territory that do not belong to the Association. Some of these schools desire membership, but under the present constitutional provision they must wait until an equal number of institutional or individual representatives of higher education apply for membership and are found eligible.

This year the accredited list of the Association will carry three hundred and thirty-three secondary schools, all of them eligible to membership in the Association. There is not likely ever to be a time when the representation of higher institutions can be brought up to that figure. The Association then through one committee is declaring a large number of schools eligible, while through another committee it is refusing membership to these same schools. The Executive Committee sees no way out of this difficulty except to abolish the constitutional provision requiring it to keep the membership equal as between higher and secondary education.

The Executive Committee believes that no harm will arrive by making the change proposed. Secondary schools are not accredited by the Association unless they are taught by college graduates or by those of equivalent education. Consequently this Association is sure always to be composed of college people. There never has been an occasion in this Association when on any question the representatives of secondary education have voted one way and the representatives of higher education another way. We are all secondary school people

when we discuss a secondary school problem, and all college people when we discuss a college problem. The Executive Committee favors a policy that will enable us to recommend desirable institutions for membership as they may apply, whether they be higher or secondary.

The report of the Committee on Athletics was presented by the chairman of the committee, Principal E. L. Harris of the Central High School, and was read by the Secretary as follows:

REPORT OF THE COMMITTEE ON ATHLETICS.

In accordance with your action at the last meeting, your Athletic Committee had printed for distribution its last report. It was rather late in the season and doubtless all members did not receive copies.

The results of the work of this Association in its recommendations in regard to Athletics have been very satisfactory. In many of the states, associations have been formed among the secondary schools and among the colleges that have adopted your recommendations. This is especially true in reference to the one year residence rule.

Your Committee reports, therefore, very satisfactory progress in this district in the line of athletics.

It may be well now to discharge your Committee as there is little work for it to do except to watch the continued development in higher ideals in all Athletic relations. EDWARD L. HARRIS,

Central High School, Cleveland, Ohio.

It was voted that the report be received and the committee continued.

A report of the Medical Committee was next called for, but President H. C. King, chairman of the committee, was not present, and no report was rendered.

The following report was presented by Principal Edward L. Harris, delegate to the College Entrance Examination Board, and was read by the Secretary.

REPORT OF DELEGATE TO COLLEGE ENTRANCE EXAMINATION BOARD.

Your delegate to the College Entrance Examination Board has attended two regular meetings during the past year, the first one on April 21, and the second on November 10, 1906.

These meetings were held in New York City in the Trustees' Room of Columbia University. These meetings are strictly business meetings of the Board and are always conducted in a prompt businesslike manner. The following order at the April meeting will indicate the kind of work done.

ORDER OF BUSINESS.

- I. Roll Call.
- II. Minutes of Meeting of November 11, 1905.
- III. Communications from the Chairman.
- IV. Communications from the Secretary:
 1. Letters from absent members.
 2. Progress of the work of the Board.

V. Communications from the Executive Committee:

1. Requirements in Music.
2. Requirements in Geography.
3. Date of Examination in 1907.
4. Appointment of Examiners for 1907.

VI. Reports of Special Committees:

1. Auditing Committee.
2. Committee on Standard for Admission to Membership.
3. Committee on Laboratory Note-book Certificates.

VII. Communications from Committee on Revision :

1. Ratings in French bc and German bc.
2. Modernization of Texts Recommended in French and German.
3. Relations between Examiners and Readers.

VIII. Miscellaneous Business :

1. Position of Zoology and Music in Time Schedule.

One of the most interesting reports was the one submitted by the Committee on the standard for admission to membership of which Dean Hurlbut of Harvard was chairman. You will note the attempt to define a college. The following is the report:

STANDARD FOR ADMISSION TO MEMBERSHIP IN THE BOARD.

In the College applying for admission:

1. There shall be specifically defined and consistently carried out, whether by examination or certificate (or for the admission of special students), requirements for admission which shall in every case be equivalent to a four years course in a college-preparatory or high school of good grade, able to prepare its pupils for admission to the colleges already belonging to this Board.

2. The members of the faculty shall have an academic training adequate to maintain a high standard of teaching; they shall bear a proper proportion to the students to be taught, and shall be sufficient in number to permit of proper specialization in the subjects assigned to each individual instructor.

3. The breadth of the college curriculum, the standard of graduation, the grade of work and the amount of work demanded shall be proper subjects of inquiry by the Executive Committee and shall constitute factors in determining their decision.

4. There shall be no preparatory department under the government or instruction of the college faculty.

5. There shall have been, for at least three years preceding the application for admission, an average of at least fifty students in the regular entering classes (courses in arts and in science to be reckoned together for this purpose).

6. There shall be an annual free income bearing endowment, yielding in no case less than \$20,000 annually, in case of State Universities or State Colleges, an equal appropriation, expended exclusively on the undergraduate department, as well as libraries, laboratories, buildings, and equipment adequate to maintain the degree of efficiency and the standard of scholarship contemplated in the above provisions.

II.

Every college desiring to be admitted to membership in the Board shall be required to fill out and file with the secretary at least three months

go no further than the high school," is doubtless theoretically correct, but I challenge the statement under our present definitions. It is wholly impracticable. Wilson Farrand, in an admirable paper before the Schoolmasters' Association of New York and Vicinity, asks this question: "Are college entrance requirements too great in quantity?" His reply is: "I answer the question unhesitatingly in the affirmative." I, as unhesitatingly, endorse his answer.

There is no question in this district as to the number of units required for entrance to college. Fifteen units are not too many; but the size of the unit makes all the difference in the world. It makes some difference to the farmer selling produce whether he is to give fifteen pecks or fifteen bushels. Let us look for a moment at the measure in the "unit" of each of three or four subjects. In Algebra, the requirement is nominally unchanged, *i. e.*, through a certain topic, but examine any modern text and see how much has been inserted within a few years. The Graph is only one of the additional topics. In Geometry, one year should be sufficient, but again the new texts will show a fifty per cent increase and a large amount of original work. Valuable, yes, the most valuable part of the work perhaps. Where examinations are to be taken the range is at least seventy-five per cent broader than formerly. Take Physics, with its largely increased mathematical work. One eminent instructor said to me: "We are all up in the air in the subject, teachers and pupils." Some splendid work is being done changing the requirements in this subject, and I congratulate Professor Mann and his commit-

tee for what they have done in bringing the subject "down near the earth again." The maximum amount of Latin remains the same, but it is not possible to do justice to the amount required in four years with five recitations each week. Yes, it is possible by giving as much time to that as to all the other subjects combined. I have often found that to be the real situation. The statistics show a large increase in the number of those taking Latin in our secondary schools, but I do not remember that the statistics showed the number that had "fallen by the way;" showed how many had really completed the course. In the Modern Languages, there is too much given in both the minimum and maximum, especially in the former where there should be time for drill and growth.

Of course the pressure cannot be as great in the North Central district, under the accrediting system, as in the East under the College Board. I am thoroughly in sympathy with our system and hope that it may be extended in time, but the East does not take kindly to the accrediting system. I am not opposed to examinations conducted as they are by the College Board with a review by secondary men who are familiar with the age and conditions of the secondary student, providing the definitions be reduced to reasonable limitations and be the same as in the accrediting system.

For those high schools which are preparing students for the eastern colleges and consequently for examinations, the task is indeed a difficult one. I quote from Mr. Farrand's paper: "Fifteen points are required to enter Columbia. The entrance requirements of Princeton amount to something over

"The policy of the Board, up to the present time, has been to adopt, wherever possible, the recommendations of authoritative committees of specialists, as in the case of our requirements in English, History, Mathematics, and Modern Languages. While this policy has undoubtedly been wise, two difficulties have already developed.

"The first is that there is no uniform method of appointing these committees, and in most cases no provision for the continuance of the committees and of their work. The English Conference is appointed by the four Associations of Colleges and Preparatory Schools, and meets regularly every two or three years, so that the continuance of its work is provided for. Other committees were appointed respectively by the American Historical Association, the American Mathematical Association, and the Modern Language Association, while some committees were appointed under the authority of the National Educational Association. In every case these committees appear to have done their work, and then to have gone out of existence, so that there is no way to secure the slightest change in any of these requirements, unless new committees are appointed, or unless the Board changes its policy and assumes the responsibility of making any modifications that it may think desirable.

"The second difficulty is that there is no central committee of revision and adjustment, and, therefore, no means of pruning the excessive demands of specialists—if such occur. It is charged that such excessive demands have been made, and, without entering into the question, it may be admitted that there is at least a danger of this, and that any

permanent plan for the formulation of entrance requirements should guard against such a possibility.

"Four possible methods of framing requirements have been suggested and considered by your committee. The first is that the Board should assume the responsibility of appointing the committees in the various subjects, drawing upon its force of readers and examiners, or selecting individuals from the colleges represented in the Board, and from secondary schools. Your committee is of the opinion, however, that this plan, which would involve a radical change of policy on the part of the Board, would involve so many complications, and would mean such a centralizing of power in the Board, that it would be distinctly unwise and undesirable.

"The second plan is for the Board to request each of the associations devoted to special subjects, such as the Historical and Modern Language Associations, to maintain a permanent committee which should meet at regular intervals of, say, two or three years.

"The third suggestion is to follow the plan of the Conference on Uniform Entrance Requirements in English, and ask the different associations of colleges and preparatory schools to unite in appointing joint committees to frame and revise the requirements in the various subjects. There are four of these associations, and if each appointed three delegates, there would be formed a committee of twelve, which would be fairly representative of the whole country and of the various types of institution.

"The fourth suggestion is of a combination of the second and third plans. It is that, wherever practicable, each of the associations devoted to special subjects should appoint a committee, say of five members, and each of the associations of colleges and preparatory schools should appoint two delegates, the joint committee to frame the requirement in that subject.

"The one definite recommendation which the committee makes at present is the establishment of a committee of review, composed of members of the Board, whose particular duty it would be to weigh and consider all reports of the different special committees and to make definite recommendations to the Board as to their acceptance or modifications. It might also serve as an organ of communication with the different committees, transmitting to them any criticisms or suggestions that might be deemed of importance. This committee of review your committee regards as one of the greatest importance and as likely to become one of the most valuable features of the Board's work. It should be large enough to be fairly representative, but not of such size as to be unwieldly; and it should be selected with great care, special consideration being given in this connection to the judicial character of its duties. The secondary schools should, of course, be adequately represented in its membership. The membership of the committee should also be reasonably permanent, a majority of its members holding office from year to year. It is not proposed that this committee should have absolute power. Any alteration or modification of the requirement recommended by any spec-

ial committee should be made only by vote of the full Board, but the discussion and investigation of these questions would be carried on by the committee of review, and its recommendations should come to the Board with the force of authority."

This report caused a lively discussion. The four recommendations were referred back to the committee to report at the May meeting. The Board did adopt the recommendations for a committee of review and authorized its chairman, President Butler, to appoint such a committee subject to the call of the chairman. President Butler appointed the following:

Dean Hurlbut of Harvard, Chairman.

President Taylor of Vassar.

Dean Crane of Cornell.

Dean Ferry of Williams.

Wilson Farrand of the Middle States and Maryland Association.

William Gallagher of the New England Association.

Edward L. Harris of the North Central Association.

This committee will be a most important one of the College Entrance Board and will doubtless have great influence in this country in establishing some central authority on definitions and uniform requirements for College Entrance.

Your delegate believes that the College Entrance Examination Board is doing a great work and that the North Central Association should co-operate with it in the question of definitions and college entrance requirements.

Respectfully submitted, EDWARD L. HARRIS.

definitions and limit the same in harmony with the recommendations of the Schoolmasters' Association of New York and Vicinity.

Second, that this Association ask the College Entrance Examination Board to establish, or to join with the North Central Association in establishing, a permanent commission on definitions in each subject of the secondary school, the Commission to be composed as follows: Three specialists from each of the associations of specialists and two from each of the four associations of colleges and secondary schools in the country; that is, the associations of specialists each be asked to appoint three members—for example, the Historical Association to appoint three members—and each of the four associations—the New England, the Middle States and Maryland, the North Central, and the Southern—be asked to appoint two from their own committees on definitions, one of whom at least shall be a secondary man.

Third, that all questions as to revisions of definitions at any time be referred to their respective commissions.

Fourth, that all students who come to the colleges of the North Central Association without certificates from the secondary schools, but who must take the examination of the college, be given the examination of the College Entrance Examination Board. With the harmony and unity of the definitions, this would be possible and the two systems would work together.

It was voted that the recommendations made in President Harris's paper be adopted.

The report of the Treasurer, Principal J. E. Armstrong, Englewood High School, Chicago, was presented as follows:

**REPORT OF THE TREASURER OF THE ASSOCIATION FOR THE YEAR ENDING
MARCH 29, 1907.**

RECEIPTS.

Cash on hand at date of last report.....	\$145.50
From the sale of reports and blanks.....	39.95
From eighty-one \$3 memberships.....	243.00
From seventeen \$5 memberships.....	85.00
From eighteen \$10 memberships.....	180.00
Total.....	<u>\$693.45</u>

DISBURSEMENTS.

Printing.....	\$291.29
Expenses of committees.....	151.40
Express	2.00
Postage (and exchange).....	2.20
Total.....	<u>\$446.89</u>

Cash on hand..... \$246.56 \$693.45

**J. E. ARMSTRONG,
TREASURER.**

March 29, 1907.

The Executive Committee recommended the following institution and individuals for membership in the Association:

FOR INSTITUTIONAL MEMBERS.

The East Division High School, Milwaukee, Wisconsin.

FOR INDIVIDUAL MEMBERS.

E. J. Townsend, Professor of Mathematics, University of Illinois.

A. A. Reed, High School Inspector, University of Nebraska.

C. E. Swanson, Superintendent of Public Instruction, Pierre, South Dakota.

H. G. J. Coleman, High School Inspector, University of Colorado.

F. W. Ballou, High School Inspector, University of Cincinnati.

Walter Libby, High School Inspector, Northwestern University.

Webster Merrifield, President of University of North Dakota.

On motion, the recommendations of the Committee were adopted, and the institution and individuals named above were elected to membership in the Association.

The Committee also presented the following amendments to the Constitution:

1. That Article 3, Section 3, be stricken out.
2. That the following section be added:

If the dues of any member shall remain unpaid for a period of two years, such membership in the Association shall lapse.

On account of the fact that the number of secondary school memberships is in excess of the members from higher institutions, it was decided that no more secondary schools shall be elected, at least until the Constitution shall be changed. The amendments, in accordance with the Constitution, were laid on the table for one year.

*The Committee named Professor A. S. Whitney of the University of Michigan as delegate from the Association to the Williamstown Conference.

Professor J. V. Denney was then called upon by the President to explain the action of the Executive Committee. He spoke as follows:

Although the amendment cannot be voted upon before the next regular meeting of the Association, it seems desirable at this time, to make known the reasons which impel the Executive Committee to introduce this amendment.

The membership of the Association is at present about equally divided between representatives of secondary education and representatives of higher

*Professor Whitney later declined this appointment, and the President named Principal F. L. Bliss to take his place.

education. Very few colleges that are eligible to membership now remain outside of the North Central Association; but there are at least two hundred eligible secondary schools in north central territory that do not belong to the Association. Some of these schools desire membership, but under the present constitutional provision they must wait until an equal number of institutional or individual representatives of higher education apply for membership and are found eligible.

This year the accredited list of the Association will carry three hundred and thirty-three secondary schools, all of them eligible to membership in the Association. There is not likely ever to be a time when the representation of higher institutions can be brought up to that figure. The Association then through one committee is declaring a large number of schools eligible, while through another committee it is refusing membership to these same schools. The Executive Committee sees no way out of this difficulty except to abolish the constitutional provision requiring it to keep the membership equal as between higher and secondary education.

The Executive Committee believes that no harm will arrive by making the change proposed. Secondary schools are not accredited by the Association unless they are taught by college graduates or by those of equivalent education. Consequently this Association is sure always to be composed of college people. There never has been an occasion in this Association when on any question the representatives of secondary education have voted one way and the representatives of higher education another way. We are all secondary school people

**The Association of Colleges and Preparatory Schools
of the Southern States;**

**The North Central Association of Colleges and Sec-
ondary Schools;**

The College Entrance Examination Board.

The said joint committee to present a plan for inter-
relating the work of these respective organizations in
establishing, preserving, and interpreting in common
terms the standards of admission to college, whatever
be the method or combination of the methods of admis-
sion, in order to accommodate migrating students and
to secure just understanding and administration of
standards.

Voted, Washington, D. C., November 18, 1905.

THE CONFERENCE.

Williamstown, Mass.

August 3, 1906.

As a result of favorable action upon the invitation extended by the National Association of State Universities on the part of the several organizations named in their resolutions, the following delegates assembled at the residence of Professor A. B. Morton, at 8:30 p. m.

Professor Herman V. Ames, University of Pennsylvania, from the Association of Colleges and Preparatory Schools of the Middle States and Maryland.

Dr. William C. Collar, Roxbury, Mass., from the New England Association of Colleges and Preparatory Schools.

Principal Wilson Farrand, Newark Academy, Newark, N. J., from the College Entrance Examination Board.

Professor Frederick W. Moore, Vanderbilt University, from the Association of Colleges and Preparatory Schools, of the Southern States.

President George E. MacLean, The State University of Iowa, from the North Central Association of Colleges and Secondary Schools.

The conference organized by the election of President MacLean as President, and Professor Ames as Secretary. On motion, President George E. Fellows, of the University of Maine, Secretary of the National Association of State Universities, was welcomed as a member of the conference. After reading, by the Secretary, of the resolutions of the National Association of State Universities presenting the object for which the conference had been called, President MacLean opened the discussion with a history of the movement that had led to this gathering, reading at some length from the Presidential address of Principal Frederick L. Bliss before the North Central Association of Colleges and Secondary Schools in 1905. A general discussion followed in regard to the nature and scope of the subjects to be considered by the conference. At 10:30 P. M. the conference adjourned.

August 4, 1906.

The conference re-assembled at 9:30 A. M. in Griffin Hall, Williams College. After general discussion, Dr. Collar presented the following resolution:

Resolved: That this conference recommend to the various Associations of Colleges and Preparatory Schools, that the colleges which accept certificates, recognize the validity of the certificates from all schools accredited by the New England College Entrance Cer-

Resolutions extending the thanks of the conference to the authorities of Williams College, to Dean Ferry and to Professor Morton for the hospitality and courtesy extended to the delegates were unanimously adopted.

The minutes were read and approved subject to verbal changes.

The conference adjourned sine die at 12:30 p. m.

Appendix I.

Permit me to add to the report as certain excerpts from the report of the Commissioner of Education in New York, indicative of what may prove an important movement from that quarter, and one, possibly, that in time may co-operate or coalesce with the movement that the permanent commission will have in hand.

Resolved: That it is the sense of this board that ratings obtained in the examinations of the College Entrance Examination Board shall be accepted in whole or in part for State academic credentials on a basis to be established by the Education Department, in lieu of examinations conducted by the State examinations Board.

Resolved: That the Commissioner of Education be authorized to appoint a committee of five to prepare a plan of certification for college entrance, to be submitted for consideration of the State Examinations Board at a future meeting."*

Appendix II.

The national association of Physics teachers have communicated their plans for the revision of

*New York State Education Department. Minutes of a meeting of the New York State Examinations Board, Albany, N. Y., January 12, 1907.

units in physics, and have asked if the proposed commission would co-operate with them. It would seem to me that it may be in the province of the proposed commission to serve as a clearing house for matters wrought out by commissions of specialists or other organizations, and give these matters national currency.

Appendix III.

President Harris's address this morning brings us the latest information concerning the discussions and proposed revisions of units of the College Entrance Examination Board. If that board, ably represented in the Williamstown Conference by Principal Farrand, elects a delegate to the proposed permanent commission, there is every reason to think it may be of great service in an attempt to co-ordinate differences of units for the entire country, for those having an accrediting system, as well as those having an entrance examination.

It was voted that the resolutions contained in this paper be approved. It was voted that the North Central Association approve of such a committee as was suggested in the report, and that a delegate be appointed by the Association. The appointment of this delegate was referred to the Executive Committee.

The President then announced the following committees:

To Audit the Treasurer's Report: Professor W. W. Boyd, Ohio State University, Columbus, Ohio; Principal George W. Benton, Shortridge High School, Indianapolis, Indiana; and Principal Frank Hamsher, Smith Academy, St. Louis, Missouri.

To Recommend the Time and Place of the Next Annual Meeting: Principal F. L. Bliss, University School, Detroit, Michigan; Dean Marshall S. Snow, Washington University, St. Louis, Missouri; and Principal H. H. Cully, Glenville High School, Cleveland, Ohio.

To Nominate Officers for the Ensuing Year: President George E. MacLean, State University of Iowa, Iowa City, Iowa; Professor F. G. Hubbard, University of Wisconsin, Madison, Wisconsin; Principal W. J. S. Bryan, St. Louis, Missouri; Director G. N. Carman, Lewis Institute, Chicago, Illinois; and Professor A. S. Whitney, University of Michigan, Ann Arbor, Michigan.

The following paper was then presented by Professor Charles A. Bennett, Bradley Polytechnic Institute, Peoria, Illinois:

THE MANUAL ARTS: TO WHAT EXTENT
SHALL THEY BE INFLUENCED BY
THE RECENT MOVEMENT TOWARD INDUSTRIAL
EDUCATION.

CHARLES A. BENNETT, BRADLEY POLYTECHNIC INSTITUTE
PEORIA, ILLINOIS.

For several years past, drawing and manual training have been finding a more and more important place in the work of our public schools. These two subjects began as the results of independent movements, but they have been growing nearer and nearer together, and in their best development they have now become so unified that they are properly designated by the single term

Manual Arts. And this development has not been merely the bringing together of the two original lines of work, but rather, the broadening and enriching of both, so that the term **Manual Arts** stands for more than was meant a few years ago by both drawing and manual training together.

At the present time there is another movement toward industrial education which is distinct from either of the two former ones. The report of the Massachusetts Commission on Industrial and Technical Education and the formation of the National Society for the Promotion of Industrial Education represent this new movement. The contention of this movement is that the public schools are too academic in character, and that the industries and the industrial workers of America are suffering for want of a kind of education that is more distinctly vocational in character. This movement would not wish to have public education less cultural, but it would emphatically demand that it be more vocational. Public education should at least do as much toward fitting for the mechanical, building, textile, and for other trades, and for agriculture, as it now does for the professions.

The **Manual Arts**, then, stand for work that is cultural first and then vocational, while the Industrial Educational movement would have the hand-work vocational first and cultural second, or perhaps more correctly, cultural by virtue of being highly vocational. The question before us is: To what extent may we harmonize these viewpoints in public school work; or, in other words, is it not possible to modify the work in manual arts so as to meet the demand for industrial education, so far as

it can be legitimately met in public schools, without establishing schools of a different type?

As we look back upon the development of manual training in America we see that when manual training first started it was very technical in character, though the aim, as set forth by its advocates, was general and not technical education. In reality the school shop at that time was but one step removed from the manufacturing shop. As the work developed, the teacher of manual training gradually came nearer living up to his general educational ideal, and this change, as might be expected, was accompanied by some sacrifice on the technical side of his work. Not always, but often—and I am inclined to think more often than not—the movement was away from the methods of the best workmen in the commercial shops. This may not have been done consciously, but it was a natural result of the continual emphasis on the general educational aim. At that time the argument constantly brought forward was: "We are not teaching a trade; we are training the faculties of the children—training the observation, the imagination, the will, etc. We hold to a democratic ideal which prevents us from condemning any boy to a life of hand labor. Every boy must have an equal chance in the public schools." The tendency of this theory was to introduce problems having less and less to do with the technique of practice in the trades. This theory was held until a new psychology was substituted for the old, and we ceased to be afraid to admit the technical or trade value of our work. Now there is no need of putting up the old-time arguments, and we are coming to have a far

more rational basis for our work. And in so far as we are doing that, we are realizing the necessity of making the technique of our work square with that of the expert workman in the commercial shop.

In the development of drawing in our public schools the record is not far different. When it started thirty years ago it was patterned after the drawing of the technical schools of England, and these schools were in close touch with English industries, yet its advocates, foreseeing the industrial future of America, urged that drawing be made a part of general education. As the instruction developed, it broadened to take on the art ideal, and while we are more than glad that it did, we recognize that in doing so it became farther removed from the industries. Now under the influence of the Arts and Crafts Movement, and in contact with the broader development in manual training, drawing is coming back to industry again and coming with a richness that portends a remarkable future for industrial art in America.

Turning now to the present Industrial Education movement, it is easy to trace its origin to the failure of the public schools to keep up with the times. Industry has developed faster than the schools have developed on the side of industry. In this matter too, as in manual training and drawing, we have followed our democratic culture ideal of education, and practical education has suffered thereby. We have said, "Every boy must have a chance to become president of the United States," and we have shaped his course to accord with our idea of the shortest route. In this it looks now as if we have made a mistake—not in having a

6. Evening technical
wherever a reasonable
The recent success of sm
Massachusetts and Broo
that there is a real demand
uation-school work. Not
great help to those who
thus gained with real indu
the school. To talk with
shops and learn their need
cellent experience for the
subject.

The six modifications of
ual arts just suggested see
opment of the subject and
brought about even if there
on the subject of industrial
seem that they go about as
public education without an
of the public schools on an
establishment of independent
schools for pupils who prefer
time-honored one.

After all has been said on
still remains the obvious fact
work in the schools is so close
work that if the public schools
are to teach trades or are going
nical courses as will even in part
demand for trade instruction,
procedure is to have it come about
lution of the present work in the
if such an evolution is to take place
prepare themselves more thorough-

This association in coöperation with the workers should prepare a definition of work and a recommendation of credit allowing college entrance. When this is done inspection should be given this work as school subjects. Doubtless much of time in the manual arts has not been credited. However, a standard of work, credit and credits given for work which requirements will prove a tremendous improving the quality of the work manual arts in secondary schools. Persevere in manual training. I believe it being, rightly pursued, equal to that of elect in the school course and I believe time when we should so recognize it forth while by placing it upon the list of elective subjects.

This was continued by Principal J. O. High School, Ottawa, Illinois; Dean Washington University, St. Louis, G. N. Carman, Lewis Institute, President George E. MacLean, Iowa, Iowa City, Iowa; and Professor Valdo, Purdue University, La-

ation which we often hear others in their appreciation some subjects manual so far we ob- first place any one the

President George E. MacLean, of Iowa State University, delegate to the National Association of State Universities, then presented the following report:

I have the honor to report as your delegate to the conference on inter-relating college entrance requirements and credentials by submitting the following printed copy of the meeting of the conference, held at Williamstown, Mass., August 1906.

It is a significant and encouraging fact that the delegates, without previous conference and with some anticipation that there might be differences, found themselves of one mind, acted unanimously, and believed that the time was ripe for a national movement of great value toward establishing national entrance requirement standards. It became evident that there was no necessary antagonism between an individual examination and certificate system and an institutional inspection and accrediting system. It is necessary to define units and to have responsible bodies to interpret and administer the terms.

The resolution of the greatest significance which I recommend, together with the other resolutions of the conference you adopt, is that of the formation of a national permanent commission consisting of delegates from the bodies like this mentioned in the report, and such other bodies as may adhere and be accepted. The following bodies have already accepted the report of the Williams-town Conference: The National Association of State Universities; the New England Association of Colleges and Preparatory Schools; the Association of Colleges and Preparatory Schools of the Southern

States; the Association of Colleges and Preparatory Schools of the Middle States and Maryland.

The following delegates have been appointed for the National Commission:

National Association of State Universities, George E. MacLean.

New England Association of Colleges and Preparatory Schools, William C. Collar.

Association of Colleges and Preparatory Schools of the Middle States and Maryland, Herman V. Ames.

I recommend that this Association appoint a delegate, either a secondary school man or one who is thoroughly familiar with secondary school work as well as with college work.

MINUTES OF THE CONFERENCE FROM THE FOLLOWING ASSOCIATIONS OF DELEGATES ASSEMBLED AT WILLIAMS-TOWN, AUGUST 3 AND 4, 1906.

THE CALL.

Resolutions of the National Association of State Universities.

Resolved: That the Executive Committee of the National Association of State Universities be authorized to seek for the appointment of a joint committee consisting of at least one delegate from each of the following organizations:

The New England Association of Colleges and Preparatory Schools;

The Association of Colleges and Preparatory Schools of the Middle States and Maryland;

manual arts and to urge that a place be given to their study and practice in our schools. As a result of this interest, they are too often called fadists, and are ridiculed for their impractical notions.

DIRECTOR CARMAN:

I think we all agree with Dr. Woodward in this estimate of the value of manual training to boys and girls, whatever their subsequent work may be, whose circumstances are such as to enable them to attend the high school. But there are other boys and girls whom we are in danger of leaving out of account because they are unwilling or unable to attend the high school. Many of them do not complete the work of the grammar grades. If the schools are to count for anything in supplying the demand for skilled industrial workers for the sake of the workers as well as the industries, we must offer instruction that is a preparation for some particular industrial vocation. If we are to keep these boys and girls in school, when they want to get out, so that they can do something and earn something, we must teach them something that satisfies their desire for activity and increases their earning capacity. This is just what Mrs. Woolman has done for girls in the New York Manhattan Trade School. This is what is contended for by those who investigated the condition of working boys and girls for the Massachusetts Industrial Commission. This is our justification for making clear the connection between education and vocation. The industrial efficiency of Germany today is largely due to the industrial education of her workers. With inferior national resources Ger-

many's supremacy is due to the fact that she has cultivated the talents of the young by teaching and training her workers. For the greatest resources of any nation are not its farms and mines and forests, but its boys and girls. Too many of our young people are dropping out of school to become errand boys and department store girls, and drift into unskilled and poorly paid industries. We should strive to check this waste of our resources.

PRESIDENT MACLEAN:

May I ask the gentleman who has given us such an able paper if agriculture, which was not mentioned in his paper, is an industry? And if so, how it should be related to the subjects of manual training and domestic science in industrial education? This is a living question in Iowa where even the legislature is considering the establishment of agricultural high schools.

As Chicago is in the front dooryard of one great farm in the Mississippi Valley, it seems as if this subject should be adverted to in a discussion here. Is there not danger that educators may not be as awake as business men and legislators to the rising problem of the place of agriculture in industrial education? Might it not afford a topic for an entire session of this association?

PROFESSOR WALDO:

There are and always will be many who can see little or no use in intellectual gymnastics and the formal side of education. But connect education through science, art, and industry with production and wealth and you have immediately interested every one. In our high schools and grades

this connection must be made with the common, every day experiences and activities of the pupils. In the cities it will be through the constructive trades and artistic products. In the country it must come through the fruits of farm labor.

This is the opportunity of the wide awake teacher to emulate the apostle who said "I am made all things to all men that I might by all means save some." May I illustrate? In two northern counties of Indiana, La Porte and Starke, the county superintendents under the direction of Purdue University organized among the boys contests in corn growing. Several hundred boys took part and proceeded according to the most modern methods of fertilization and seed selection. For the work a considerable sum of money was easily raised because it appealed directly to all the intelligent people. Various prizes were offered, usually some extra educational opportunity rather than money. In La Porte there was held a convention of the contestants, with speech-making and naming of awards. The average yield of corn per acre in the two counties was 38 bushels; while boys engaged in the contest showed an average of 84 bushels. As a result the schools of the counties were never before so efficient, so enthusiastic, nor showed such fine results. Tradition and ignorance no longer hold the people back. Scientific development and rapid progress are the order of the day. Make it evident that our schools have their thoroughly practical and useful side as well as their ideal, and the day is won for all education, higher as well lower. None of our schools will lack for equipment, teachers, and marked efficiency,

SECOND SESSION, FRIDAY AFTERNOON

The Association was called to order at two o'clock p. m. by the President. He announced the report of the Commission on Accredited Schools by President Harry Pratt Judson of the University of Chicago, chairman of the committee. President Judson's report concerned itself with the work of the Commission and the work of the General Education Board, and was as follows:

To the North Central Association of Colleges and Secondary Schools:

The Association will understand that it has been the custom for a long time for the chairman of the commission on accredited schools to make a report informally and not in writing. In accordance with that method I shall state briefly some things today which should fall under three heads.

First: The Board of Inspectors has been occupied as usual with the study of secondary schools throughout the limits of the Association and presents today a recommendation. On the accredited list for the ensuing year some few schools which were in the list last year have been omitted; some because they do not conform to the conditions as they now stand, and a few because reports have not been received from them. On the whole, however, the list is increased in number. It is the opinion of the commission that the work of accrediting is satisfactory and is producing desirable results. As an illustration only I may say that one of the colleges in the limits of the Association has discontinued its separate method of determining the qualification of candidates for admission and accepts the credits of

this work if it has been satisfactorily done in the secondary school. In the subject of English, then, four units are required for the bachelor's degree, three of which are usually taken in the secondary school and one in college.

The admission requirements in mathematics are two or three units and enough is required in college to amount to four units, but engineering schools, with the most advanced requirements for admission are coming to insist on what amounts to four units. A high school that meets the requirements of these engineering schools, has at the same time met the usual requirements for the bachelor's degree in mathematics, so that in this subject of the four units required for the bachelor's degree two may be given either in high school or in college.

In the sciences one year in physics is often required for admission, but nearly all the colleges in our territory will accept as many as four or five admission units in science and most of our first class high schools are now equipped to give instruction in the five units that are defined by the Commission. Elementary courses in science are given in all colleges for the benefit of students who entered without such instruction. We may say then that the three or four units in science usually studied by candidates for the bachelor's degree may be pursued in high school or in college.

The situation so far as history is concerned is almost identical with that in the sciences.

In foreign languages seventeen admission units have been defined by the Commission, four each in Latin, French and German, three in Greek, and two in Spanish. Six or seven of these units were until

recently required for admission to college, but now most of the colleges and universities in our Association require only two units in foreign language for admission, so that we may say that of the seven or eight units in foreign language usually studied by candidates for the bachelor's degree five or six may be taken in the high school or in college.

It appears then from these considerations that half the work now accepted for admission to college is duplicated in college and half the work required in college for the bachelor's degree is duplicated in the secondary school, or, what amounts to the same thing, half the combined school and college requirements for the bachelor's degree may be pursued, and, as a matter of fact, are now pursued either in school or in college. The usual college course is made up of about equal parts of studies appropriate to the secondary schools and of more advanced or professional subjects that should be offered only in the college or the university.

In considering the question before us, are we not agreed that, as an Association, our main business is to take such action as will be to the advantage of the young men and women who are attending these schools and colleges? That this action will in the long run be to the advantage of our country and of every school and college goes without saying. Failure to coöperate in fixing and in maintaining standards has led too often to an unseemly scramble for students, the most serious consequence of which has been that what is best for the students has been sacrificed to what seemed to be of advantage to the college. In the territory of this Association there are 263 high schools in cities having a population of over

sional or technical work to count for the bachelor's degree.

We are all familiar with the views that were held by President Harper. He said in 1902, "Ten years from now the high schools all over the country will have added fifth and sixth years and will be doing the college work which now falls to the first two years of the college."

At the meeting of this Association, held in 1903, Professor Julius Sachs, who is at the head of two important secondary schools in New York City, took the opposite view. He said, "Speaking now for the secondary schools and as a member of the secondary profession, the feeling that is most prominent in my mind is that no greater danger besets the secondary teacher than the blind hope that he can at some time or other, or through some peculiar circumstances, supplant the work of the early college years. I believe we are as far removed from that as it is conceivable to be at the present moment."

One who reads Professor Sachs's defense of his position, in the Educational Review for January, 1906, and President Hadley's article, in the Century for April, 1905, may see what the real issue is. I think it may be fairly stated as the aristocratic vs. the democratic conception of all education in advance of the elementary school. Yale and Princeton, and the colleges that follow their lead, doubtless satisfy a real demand when they maintain a four-year college course, intact, for those whose tastes and circumstances enable them to take advantage of the opportunities offered. These institutions need make no concessions to the fitting schools on the one hand or to the professional schools on the other hand. There

are also many private schools, besides those presided over by Dr. Sachs, which find it to their advantage to satisfy the demand that they serve as fitting schools for such colleges. Were the colleges and secondary schools of the North Central States limited to institutions of this type, there would be nothing for this Association to do but to consider college entrance requirements.

But with the changing of the requirements for the bachelor's degree there has come about a change of conditions under which the degree may be obtained. It is no longer essential that all the work should be taken in the same institution. In order that the needs of our territory as a whole may be met it should be possible for one student to take a part of his college course in an advanced high school and the rest in a university; while another may be so situated that the small college with its preparatory department offers the needed opportunity. So varied are the conditions that prevail that varied agencies are needed if the best educational advantages are to be within reach of all our youth who aspire to a college training. The important question is not when or where the bachelor's degree should be given, nor indeed what it shall stand for. Titles and degrees as such have but little significance, and it may be just as well that such is the case. But it is important, to use the words of Dr. Elmer Brown, that "there be no *cul-de-sac* in the educational systems of the republic, but that instead every child, to the remotest district of our land, shall find the humble school of his neighborhood opening up into the higher schools, and so on up into the highest universities."

The Commission on Accredited Schools was or-

ganized "to establish a definite form of affiliation and credit, fixed, comprehensive, and uniform, between the colleges and secondary schools of the North Central States." If this means anything, it means that a system should be put into operation by which the student who has done one, two, or even three years of college work in one institution may know definitely in advance what credit he will receive if he passes to another. This implies definitions of units of college work corresponding to the units of secondary school work as now defined. It would appear that the Commission on Accredited Schools cannot accomplish what it was designed to do without becoming a Commission on Accredited Schools and Colleges.

Three years ago a committee was appointed, of which President Thwing was chairman, to take into consideration the advisability of extending the work of the Commission so as to include accredited colleges, and to determine what should be the requirements for the bachelor's degree. The committee has made two reports, but the only reference to accrediting colleges is the following: "It has been suggested that the committee draw up what might be called a list of accredited colleges coördinate with a list of accredited fitting schools. The committee is loath to make such a classification. The attempt is beset by serious difficulties."

It was not anticipated that the committee would prepare a list of accredited colleges, but it was hoped that the question of carrying the work of the Commission into the college field would receive consideration.

The object of our Association and the Commission on Accredited Schools is "to establish fixed and uni-

form relations between the colleges and the secondary schools of the North Central States," and in the process, and as a means, of establishing such relations it is quite as important that attention be given to the colleges as to the secondary schools. It is clearly apparent that the work of the Commission should not be confined, like that of the College Entrance Examination Board, to the consideration of college entrance requirements.

As a matter of fact this Association presupposes a list of accredited colleges as well as a list of accredited schools. The call for a meeting to form the Association was issued by the presidents of the University of Michigan, the University of Wisconsin, the Northwestern University, the University of Chicago, and a committee of the Michigan Schoolmasters' Club. Invitations were sent to several prominent representatives of higher and of secondary education in the states of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Nebraska, and Kansas.

One of the questions submitted for consideration at the preliminary meeting for organization was "What shall be the qualification for membership in the Association?" The charter members, as reported by the Committee on Constitution and Nominations, were those who received invitations to the conference and were actually represented at the meeting. The colleges in this list of charter members were Ohio State University, Western Reserve University, Oberlin College; Ohio Wesleyan University, the University of Michigan, Albion College, Indiana University, Wabash College, DePauw University, University of Illinois, Northwestern University, University of Chi-

cago, Lake Forest College, Illinois College, Illinois Wesleyan University, University of Wisconsin, Beloit College, State University of Iowa, Cornell College, University of Missouri, and Washington University.

By Article III of the Constitution membership depends on nomination by the Executive Committee and election by the Association. Until the establishment of the Commission on Accredited Schools the Executive Committee accredited both colleges and schools. From the organization of the Association the Executive Committee has passed on applications of colleges for admission, refusing some and accepting others. In addition to the charter members the following colleges have applied for membership and have been accepted : Denison University, University of Cincinnati, Knox College, Iowa College, Drury College, Missouri Valley College, Westminster College, University of Nebraska, University of Kansas, University of Colorado, Colorado College, University of Oklahoma, University of Minnesota, Park College, Miami University, Ripon College, Milwaukee-Downer College, Lawrence University.

The following institutions have been represented by individual members: Case school of Applied Science, Purdue University, Rose Polytechnic Institute, Earlham College, Armour Institute of Technology, Eureka College.

Membership has lapsed in the case of the following colleges: DePauw University, Illinois College, Illinois Wesleyan University, University of Minnesota, Ripon College.

Our constitution says that no college or university shall be eligible to membership whose requirements

for admission represent less than fifteen units of secondary school work, as defined by the Commission on Accredited Schools, and that no college or university shall be eligible which confers the degree of Doctor of Philosophy or Doctor of Science except after a period of three years of graduate study.

What other qualifications are considered necessary for membership have not been set forth by the Executive Committee, and as the Committee changes from year to year it is not improbable that what have been considered essential qualifications have varied, and that colleges have been admitted to membership that are inferior to others that have been rejected.

It would also appear from President Thwing's report of last year that of the 35 colleges that are now members 11 do not require for admission 15 units of secondary school work and are not therefore eligible to membership. It may also be noted that of the 66 secondary schools that are members of the Association 24 are not on the list of Accredited Schools as published last year.

It would seem from these facts that this Association has done either not enough or too much in the way of accrediting colleges. I am aware of the fact that from the time of the preliminary meeting for organization until the present time there has been a decided difference of opinion on this question. It doubtless is "beset with serious difficulties." If, however, the Association serves the purpose for which it was organized, it must meet and overcome these difficulties.

I therefore propose that the act establishing the Commission on Accredited Schools be changed to read a "Commission on Accredited Schools and Col-

leges," and that in the second article the clause "to define and describe unit courses of study in the various subjects of the high school programme" be changed to read "to define and describe unit courses of study in the various subjects of the high school and the college programmes," and the clause "to prepare a list of high schools within the territory of this Association which are entitled to the accredited relationship" be changed to read "to prepare a list of secondary schools and also a list of colleges and universities within the territory of this Association that are entitled to membership in the Association." The Board of Inspection which now prepares the list of Accredited Schools could also make a list of Accredited Colleges.

I also propose that such changes be made in the Constitution of the Association as will make it possible to include certain institutions that are now ineligible. Three years ago I noted the fact that "the object of the Association, interpreted in the light of the amendments adopted in 1898 and the Report of the Commission on Accredited Schools adopted in 1902, is to establish closer relations between two classes of institutions. These two classes are (1) colleges and universities whose requirements for admission represent not less than four years of secondary school work, and (2) secondary schools which have a four years' curriculum consisting of not less than fifteen unit courses of study, three of which must be in English and two in mathematics. Only such institutions as conform to one or the other of these two types are at present eligible to membership in the Association."

Much attention was given in the early history of

the Association to the curriculum of the secondary school and the conclusion was finally reached that "the secondary school is an institution which gives instruction, amounting to not less than fifteen unit courses of study, in advance of the elementary grade, in English and mathematics, and such other subjects of study, technical and non-technical, as are suited to the aims and attainments of the students." I now venture to propose a corresponding definition of the college as the term may be used in the North Central Association of Colleges and Secondary Schools: "The college is an institution which gives instruction, amounting to not less than twelve unit courses of study, in advance of the fifteen units of the secondary school, in such subjects of study as are suited to the aims and attainments of the students." By changing the Constitution so that it may accord with this definition of a college, the Board of Inspection could classify every institution in the North Central States that is doing satisfactory secondary or college work as a secondary school or as a college, for a definite content in the shape of units of work done, which may be tested and proved in quantity and quality, would furnish a satisfactory basis of classification.

It is no longer possible to draw a line of separation between the secondary school and the college. This may be made apparent by taking under consideration the subjects of study that are taught in both classes of institutions.

In English a year of systematic study in composition and literature is usually required for the bachelor's degree in addition to the college entrance requirements. Most colleges and universities have indicated their willingness to give college credit for

courses in handwork. They should precede most trade or technical courses. The latter we have been in the habit of speaking of as manual training courses also, but I think we shall make a mistake if we continue to do so. The difference between the best manual training high school course in pattern-making and the best engineering course in pattern-making and the best trade school course in pattern-making is very small indeed after due allowances have been made for age and previous education of the students. Certainly pattern-making is an excellent subject for the purposes of manual training, but it is so much more specialized than elementary woodworking, for example, that teaching it well in a manual training high school really amounts to teaching the pattern-maker's trade, or such part of it as is possible to teach in the time available for that subject. Otherwise how could our students, who have need to do so, go out from manual training courses and at once become journeyman pattern-makers, or from the machine shop and become journeyman machinists? Moreover, the engineering colleges have recognized the fact that the manual training high schools give technical courses and have allowed college credit accordingly. It is high time that the manual training high schools themselves recognize this fact and thus bring their theory to accord with their practice. There is a distinct advantage in doing this, because the moment it is recognized that pattern-making, forging, foundry work, machine construction and machine drawing in manual training high schools are technical courses, and not fundamentally manual training courses, the schools will cease to draw im-

aginary lines of distinction, and will set about to make the courses better technically. In other words, they will make them more technical, more practical, and in doing so come nearer meeting the demands of industrial education in reference to these trades. It would also tend to make clear the difference between subjects worthy of college credit and those suitable for entrance credit only.

This point being accepted, it is clear that the elementary or manual training courses should be broadened and enriched, and that the advanced or technical courses should be more highly specialized and made to harmonize better with trade practice.

5. Under conditions of local demand in small high schools, and as regular subjects in large high schools, more technical studies should be added. For instance, the plastic arts and the book-making arts, which are finding a welcome place in the elementary schools, should be given a corresponding place in the high schools in technical courses in bookbinding, commercial design, and clay-modeling. This is largely an undeveloped field, but one likely to yield valuable results, especially as these subjects touch the work of girls as well as boys. This leads to the thought that the work in dressmaking, cooking and millinery in manual training high schools has been more confessedly technical in character than the boys' work, and has often gained its support wholly on that basis.

From the standpoint of organization the further development of these technical courses would probably mean a more general recognition of the value of electives.

6. Evening technical courses should be given wherever a reasonable attendance can be secured. The recent success of such courses in Springfield, Massachusetts and Brooklyn, New York, indicate that there is a real demand for this kind of continuation-school work. Not only are such courses a great help to those who take them, but the contact thus gained with real industrial needs is a help to the school. To talk with the workmen from the shops and learn their needs and difficulties is an excellent experience for the teacher of any technical subject.

The six modifications of the work in the manual arts just suggested seem but the logical development of the subject and ought to have been brought about even if there had been no agitation on the subject of industrial education, and it would seem that they go about as far as can be gone in public education without an entire reorganization of the public schools on an industrial basis, or the establishment of independent industrial or trade schools for pupils who prefer such a school to the time-honored one.

After all has been said on the question, there still remains the obvious fact that the manual arts work in the schools is so closely allied to trade work that if the public schools, as now organized, are to teach trades or are going to give such technical courses as will even in part meet the present demand for trade instruction, the logical plan of procedure is to have it come about through an evolution of the present work in the manual arts. And if such an evolution is to take place teachers must prepare themselves more thoroughly; they must in-

sist on the best technique being employed in their classes; they must work for greater industrial intelligence and must recognize that our present advanced manual training courses are really technical courses and treat them as such. Then the evolution will be a natural and easy one, and we shall certainly come much nearer than ever before to realizing the ideals of those who have sought to make our public schools as much a preparation for industrial pursuits as for commerce and the professions.

The discussion was continued by Mr. W. H. Elson, Superintendent of Education, Cleveland, Ohio, as follows:

The present movement for industrial education will, it seems to me, lead to the establishment of separate and special schools for trade instruction. Perhaps to an extent the present manual training plants may serve for the conduct of evening trade schools. In no sense will these industrial schools take the place of our present manual training schools, but indirectly they will re-act favorably upon the instruction given in them.

Manual training schools stand for industrial intelligence and for individual efficiency. Some difficulties present themselves in realizing these ends. First, it is difficult to establish in them the spirit of the industries and the methods of the practical workshop and to place the school under actual shop conditions when the boys are at work. Comparatively few manual training teachers have had actual experience in the industries. This is unfortunate. Again if manual training exists primarily for purposes of mind-training, the worker's own

thought shall go into the doing. He must be given an opportunity to make plans, to select means and to express himself in the decorative treatment. In other words the manual training school must not lay exclusive stress on the development of hand skill. The blue print must not be overworked in a school that is intended to develop initiative and power on the part of the student. On the contrary it must develop and train whatever of spontaneous power pupils have and they must be encouraged and enabled to use this growing knowledge and skill in the achievement of individual and social ends. To be truly an educational subject the school must not seek manual dexterity alone, but rather the ability to solve the problem in construction and in decorative treatment in such a way as to reveal the exercise of personal good judgment and taste on the part of the pupil.

This educative kind of manual training suffers from inadequate credit allowance toward graduation and because it is not recognized as college entrance subject-matter. The result of this influence is that many students are barred from taking the work or are limited in the amount of time they can devote to it. In consequence the character of the work varies with the different schools and there is a great lack of uniformity as well as no criteria for determining values. Naturally under these conditions large concessions are made to the students in the kind and quality of work done in the manual arts. We stand in great need of a definition of a unit of work in the manual arts and for the acceptance of work that meets these requirements as college entrance subject-matter. The college entrance com-

Whereas, The most pressing need for *higher education* in this country is a better understanding between the secondary schools and the colleges and universities in regard to requirements for admission; therefore

Resolved, That the Department of Secondary Education appoint a committee of five, * * * * whose duty it shall be to report at the next annual meeting a plan for the accomplishment of this end, so urgently demanded by the interests of *higher education*."

On page 9 of the report of this Committee on College Entrance Requirements, it is stated that the committee planned to do certain things "all with a view to the ultimate determination of what should constitute a normal requirement in each of the subjects set for the admission to college."

Again, on page 43 we read: "Acting on these lines, the committee has devoted its chief energies, through several years, to securing the formulation of satisfactory courses of study which should serve as units, or norms, worthy of national acceptance. * * * * In so far as the courses of study representing national units, or norms, may be adopted by the schools and colleges, great simplification will result in the subject of college entrance requirements, the subject specifically referred to this committee."

These passages from the report of this committee are introduced, not at all with the idea of belittling the very important work done by this committee, but merely to make clear one point which is of importance to the present discussion ; namely, that the whole subject of secondary school units or

manual arts and to urge that a place be given to their study and practice in our schools. As a result of this interest, they are too often called fadists, and are ridiculed for their impractical notions.

DIRECTOR CARMAN:

I think we all agree with Dr. Woodward in this estimate of the value of manual training to boys and girls, whatever their subsequent work may be, whose circumstances are such as to enable them to attend the high school. But there are other boys and girls whom we are in danger of leaving out of account because they are unwilling or unable to attend the high school. Many of them do not complete the work of the grammar grades. If the schools are to count for anything in supplying the demand for skilled industrial workers for the sake of the workers as well as the industries, we must offer instruction that is a preparation for some particular industrial vocation. If we are to keep these boys and girls in school, when they want to get out, so that they can do something and earn something, we must teach them something that satisfies their desire for activity and increases their earning capacity. This is just what Mrs. Woolman has done for girls in the New York Manhattan Trade School. This is what is contended for by those who investigated the condition of working boys and girls for the Massachusetts Industrial Commission. This is our justification for making clear the connection between education and vocation. The industrial efficiency of Germany today is largely due to the industrial education of her workers. With inferior national resources Ger-

many's supremacy is due to the fact that she has cultivated the talents of the young by teaching and training her workers. For the greatest resources of any nation are not its farms and mines and forests, but its boys and girls. Too many of our young people are dropping out of school to become errand boys and department store girls, and drift into unskilled and poorly paid industries. We should strive to check this waste of our resources.

PRESIDENT MACLEAN:

May I ask the gentleman who has given us such an able paper if agriculture, which was not mentioned in his paper, is an industry? And if so, how it should be related to the subjects of manual training and domestic science in industrial education? This is a living question in Iowa where even the legislature is considering the establishment of agricultural high schools.

As Chicago is in the front dooryard of one great farm in the Mississippi Valley, it seems as if this subject should be adverted to in a discussion here. Is there not danger that educators may not be as awake as business men and legislators to the rising problem of the place of agriculture in industrial education? Might it not afford a topic for an entire session of this association?

PROFESSOR WALDO:

There are and always will be many who can see little or no use in intellectual gymnastics and the formal side of education. But connect education through science, art, and industry with production and wealth and you have immediately interested every one. In our high schools and grades

this connection must be made with the common, every day experiences and activities of the pupils. In the cities it will be through the constructive trades and artistic products. In the country it must come through the fruits of farm labor.

This is the opportunity of the wide awake teacher to emulate the apostle who said "I am made all things to all men that I might by all means save some." May I illustrate? In two northern counties of Indiana, La Porte and Starke, the county superintendents under the direction of Purdue University organized among the boys contests in corn growing. Several hundred boys took part and proceeded according to the most modern methods of fertilization and seed selection. For the work a considerable sum of money was easily raised because it appealed directly to all the intelligent people. Various prizes were offered, usually some extra educational opportunity rather than money. In La Porte there was held a convention of the contestants, with speech-making and naming of awards. The average yield of corn per acre in the two counties was 38 bushels; while boys engaged in the contest showed an average of 84 bushels. As a result the schools of the counties were never before so efficient, so enthusiastic, nor showed such fine results. Tradition and ignorance no longer hold the people back. Scientific development and rapid progress are the order of the day. Make it evident that our schools have their thoroughly practical and useful side as well as their ideal, and the day is won for all education, higher as well lower. None of our schools will lack for equipment, teachers, and marked efficiency,

SECOND SESSION, FRIDAY AFTERNOON

The Association was called to order at two o'clock p. m. by the President. He announced the report of the Commission on Accredited Schools by President Harry Pratt Judson of the University of Chicago, chairman of the committee. President Judson's report concerned itself with the work of the Commission and the work of the General Education Board, and was as follows:

To the North Central Association of Colleges and Secondary Schools:

The Association will understand that it has been the custom for a long time for the chairman of the commission on accredited schools to make a report informally and not in writing. In accordance with that method I shall state briefly some things today which should fall under three heads.

First: The Board of Inspectors has been occupied as usual with the study of secondary schools throughout the limits of the Association and presents today a recommendation. On the accredited list for the ensuing year some few schools which were in the list last year have been omitted; some because they do not conform to the conditions as they now stand, and a few because reports have not been received from them. On the whole, however, the list is increased in number. It is the opinion of the commission that the work of accrediting is satisfactory and is producing desirable results. As an illustration only I may say that one of the colleges in the limits of the Association has discontinued its separate method of determining the qualification of candidates for admission and accepts the credits of

the North Central Association. I will call upon Professor Whitney, Chairman of the Board of Inspectors, to present a detailed report.

Professor Whitney then presented the following report:

STANDARDS OF ADMISSION

The following constitute the standards of admission to the accredited list of the North Central Association of Colleges and Secondary Schools for the present year:

1. No school shall be accredited which does not require fifteen units, as defined by the Association, for graduation.
2. The minimum scholastic attainment of all high school teachers shall be equivalent to graduation from a college belonging to the North Central Association of Colleges and Secondary Schools, including special training in the subjects they teach, although such requirements shall not be construed as retroactive.
3. The number of daily periods of class-room instruction given by any one teacher should not exceed five, each to extend over at least forty minutes in the clear. (While the Association advises five periods, the Board of Inspectors will reject all schools having more than six recitation periods per day for any teacher.)
4. The laboratory and library facilities shall be adequate to the needs of instruction in the subjects taught as outlined by the Association.
5. The location and construction of the buildings, the lighting, heating, and ventilation of the rooms, the nature of the lavatories, corridors, closets,

school furniture, apparatus, and methods of cleaning shall be such as to insure hygienic conditions for both pupils and teachers.

6. The efficiency of instruction, the acquired habits of thought and study, the general intellectual and moral tone of a school are paramount factors, and therefore only schools which rank well in these particulars, as evidenced by rigid, thorough-going, sympathetic inspection, shall be considered eligible for the list.

7. Wherever there is reasonable doubt concerning the efficiency of a school, the Association will accept that doubt as ground sufficient to justify rejection.

8. The Association will decline to consider any school whose teaching force consists of fewer than four teachers exclusive of the Superintendent.

9. No school shall be considered unless the regular annual blank furnished for the purpose shall have been filled out and placed on file with the inspector.

10. All schools whose records show an abnormal number of pupils per teacher, as based on average number belonging, even though they may technically meet all other requirements, are rejected. The Association recognizes thirty as a maximum.

11. The time for which schools are accredited shall be limited to one year, dating from the time of the adoption of the list by the Association.

12. The organ of communication between the accredited schools and the Secretary of the Commission for the purpose of distributing, collecting, and filing the annual reports of such schools and for

such other purposes as the Association may direct, is as follows:

a. In states having such an official, the Inspector of Schools appointed by the state university. b. In other states the Inspector of Schools appointed by state authority, or, if there be no such official, such person or persons as the Secretary of the Commission may select.

The Association is very conservative, believing that such action will eventually work to the highest interests of the schools and the Association. It aims to accredit only those schools which possess organization, teaching force, standards of scholarship, equipment, esprit de corps, etc., of such character as will unhesitatingly commend them to any educator, college or university in the North Central territory.

ACCREDITED SCHOOLS

COLORADO	Chicago:	
Canon City	Austin	Elgin Academy
Cripple Creek	Calumet	Evanston Academy (N. W. Univ.)
Denver:	Curtis	Evanston Tp.
West Side	Englewood	Francis W. Parker
North Side	Hyde Park	Freeport
Durango	Jefferson	Harvey (ThorntonTp.)
Golden	John Marshall	Highland Park (Deer- field Tp.)
Grand Junction	Joseph Medill	Joliet Tp.
Greeley	Lake	Kankakee
Idaho Springs	Lake View	Kewanee
Leadville	North West Div.	LaGrange Tp.
Longmont	(Tuley)	LaSalle-Peru Tp.
Loveland	R. T. Crane (ManT'g)	Moline
Trinidad	Robert A. Waller	New Trier Tp. (Ken- ilworth.)
ILLINOIS	South Chicago	Northwestern M. Acad.
Alton	Wendell Phillips	Oak Park Tp.
Aurora:	William McKinley	Ottawa Tp.
East	Chicago Heights	Peoria
West	Clyde (Morton Tp.)	Polo
Bloomington	Danville	Pontiac Tp.
Blue Island	Decatur	Princeton Tp.
Champaign	DeKalb Tp.	Quincy
	Dixon	
	Elgin	

ILLINOIS (Cont'd)

Rockford
Rock Island
Savanna Tp.
Springfield
Sterling Tp.
Streator Tp.
Waukegan Tp.

INDIANA

Elkhart
Evansville
Fort Wayne
Goshen
Howe School (Lima)
Michigan City
Shortridge (Indianapolis.)
South Bend

IOWA

Boone
Burlington
Cedar Rapids
Clinton
Corning
Council Bluffs
Davenport
Denison
Des Moines:
 East
 North
 West
Dubuque
Fort Dodge
Grinnell
Ida Grove
Iowa City
Keokuk
Le Mars
Marshalltown
Mason City
Missouri Valley
Oakaloosa
Ottumwa
Red Oak
Sheldon
Sioux City
Vinton
Washington
Waterloo:
 East
 West

KANSAS

Arkansas City
Fort Scott
Iola
Junction City
Kansas City
Lawrence
Leavenworth
Sumner Co. (Welling-ton)

Topeka
Wichita

MICHIGAN

Adrian
Albion
Alpena
Ann Arbor
Battle Creek
Bay City (E.S.)
Bay City (W.S.)
Benton Harbor

Benton Harbor Col.

Inst.
Bessemer
Cadillac
Calumet
Coldwater
Detroit:
 Central
 Delray
 Eastern
 Western
Woodmere
Home and Day
University

Dowagiac
Escanaba
Ferris Institute
Flint
Grand Rapids
Hancock
Holland
Houghton
Ionia
Ironwood
Iron Mountain
Ishpeming
Jackson
Kalamazoo
Lake Linden
Lansing
Manistee
Manistique
Marshall

Marquette

Menominee
Mich. Mil. Academy
Michigan Seminary
Monroe
Muskegon
Mt. Clemens
Mt. Pleasant
Negaunee
Owosso
Pontiac
Port Huron
Saginaw, E. S.
Saginaw, W. S.
Sault Ste. Marie
South Haven
St. Johns
St. Joseph
Three Rivers
Travers City
Wyandotte

MINNESOTA

Albert Lea
Anoka
Austin
Crookston
Duluth Central
Faribault
Fergus Falls
Hastings
Little Falls
Mankato
Marshall
Minneapolis:
 Central
 East
 North
Montevideo
Northfield
Owatonna
Rochester
St. James
St. Paul:
 Central
 Humboldt
Stillwater
Virginia
Wilmar

MISSOURI

Bless Mil. Academy,
(Macon)
Booneville
Carrollton

(MISSOURI (Cont'd)		Central	Watertown
Chillicothe		East	Yankton
Drury College		North	
Academy		South	
Kansas City:		Coshocton	
Central		Dayton	WISCONSIN
Manual Training		Delaware	Antigo
Westport		East Cleveland	Appleton
Kemper Mil. School		East Liverpool	Ashland
Kirkwood		Elyria	Baraboo
Macon		Findlay	Beaver Dam (Wayland
Marysville		Fostoria	Academy)
St. Louis:		Fremont	Beloit
Central		Gallipolis	Berlin
McKinley		Greenville	Chippewa Falls
Smith Academy		Hamilton	Eau Claire
Yeatman		Hillsboro	Elkhorn
St. Joseph		Ironton	Fond du Lac
Sedalia		Kenton	Grand Rapids
Trenton		Lakewood	Hartford
Webster Groves		Lancaster	Janesville
NEBRASKA		Lima	Kenosha
Beatrice		London	La Crosse
Brownell Hall		Mansfield	Lake Geneva
Fremont		Marion	Madison
Grand Island		Middletown	Mariotowoc, North
Hastings		Mount Vernon	Marinette
Lincoln Academy		Newark	Marshfield
Lincoln		New Philadelphia	Menomonie
Omaha		Oberlin	Merrill
South Omaha		Oberlin Academy	Milwaukee:
York		Oxford Col. Acad.	East Division
		(Women)	South Division
		Painesville	West Division
		Piqua	Milwaukee-Downer
		Portsmouth	Seminary
		Salem	Oshkosh
		Sandusky	Plymouth
		Sidney	Portage
		Springfield	Racine
		Steubenville	Racine Col. Grammar
		Toledo	School
		Troy	Reedsburg
		Van Wert	Ripon
		Warren	Sheboygan
		Washington C. H.	Stevens Point
		Willoughby	Superior:
		Wooster	Blaine
		Xenia	Nelson Dewey
		Youngstown	Tomah
		Zanesville	Washburn
OHIO		SOUTH DAKOTA	
Akron		Aberdeen	Waukesha
Bellefontaine		Deadwood	Waukesha (Carroll
Bowling Green		Mitchell	College Academy)
Canton			Waupaca
Chillicothe			Wausau
Cincinnati:			Wauwatosa
Hughes			Whitewater
Walnut Hills			
Woodward			
Cleveland:			
Central			
East			
Glenville			
Lincoln			
West			
Columbus:			

It was voted to adopt the report of the Board of Inspectors, and to approve the changes made in the rules.

President Judson spoke further:

Second: The committee on accredited colleges, consisting of the Chairman and Secretary of the commission and of President Baker of the Colorado State University held some preliminary discussion upon the general discussion early in the year. New and interesting developments relating to colleges throughout the country, however, assumed such shape that it seemed best to the committee not to complete their study during the current year but to call the attention of the Association to these particular matters and request a continuance of the committee for another year, at the end of which time it is hoped an adequate report will be presented.

The matters in question relate to the work of the Carnegie Foundation for the advancement of teaching on the one hand, and of the General Education Board upon the other. Each of these has a very close relation to colleges within the limits of the North Central Association. It seems to the committee best, therefore, to have a brief presentation of the main facts relating to these great endowments and their use. Accordingly I shall ask President King of Oberlin College, and a member of the Board of Trustees of the Carnegie Foundation to make some statement as to the work of his Board.

President King then made the following statement:

I am glad to say a word concerning the work

the claim that modern science, when properly presented, is able to give an education that is at least no less broad and valuable than that derived from the humanities. They want to find out what are the broadening and vitalizing educational elements of the humanities. They are trying to understand why science has neglected these elements until now, and how they may be adapted to her use. For they now begin to see clearly that there are not two separate, sharply contrasted bodies of information, the learning of one or the other of which constitutes education ; but rather, that there is one great, tangled mass, consisting of human experiences and human interpretations of human experiences, and that he alone is broadly educated who is able to disintangle and perceive the beauty in some tiny fraction of that mass, without at the same time severing its connection with the whole of which it is but a part.

The teachers in America are not alone in this. That the problem is not a local or an ephemeral one is shown by the fact that this movement for its solution is not limited to a small section of any country. It is an international movement. Thus in Germany, in 1902, the German government issued a decree stating that henceforth the graduation certificates of any one of the three types of German secondary school would be accepted by the government as standing for equal educational attainments. Entrance to the Universities of Germany is now granted on the diploma of the science schools, as well as on that of the classical ones.

The effect of this decree was to arouse the science teachers to their opportunities and to their

responsibilities. They at once started an earnest and thorough investigation of the present methods of teaching science, and of the place of science in the curriculum. This investigation has been conducted by a commission of twelve members appointed by the German Association of Physicians and Natural Scientists. This commission has issued two reports in which are set forth the principles of correct science teaching, together with syllabi for the various sciences and a schedule of hours for the different schools.

In France, in like manner, the government decreed, in 1902, that but one kind of bachelor's degree, the B. A., should hereafter be given in France. This amounts to recognizing the largely scientific courses as of equal educational value with the largely classical and literary courses. The result in this case was to call forth a series of essays by some of the leading French scientists on the proper methods of teaching science. As one of their number has stated it, the effect of this decree on the sciences is that instead of being "treated as materials for examinations, they may now become instruments of culture." The whole agitation there has had the effect of greatly increasing the power of science in the schools. Thus Germany and France have officially recognized the fact that scientific study should have, over and above any utilitarian returns, an educational value at least as great as that possessed by the humanities.

If it is true that science is popularly believed to be technical and utilitarian, it is but fair to ask whether this belief is well-grounded. There can be little doubt in the mind of anyone who looks through

the published texts and manuals, intended to be used for elementary instruction in science, that this popular belief is well-grounded. The usual high school texts in science are condensed and highly peptonized editions of the advanced treatises. They are essentially adult in their methods of presenting the subject, and yet have omitted from them many of the parts that are particularly interesting to adults. Hence they are too much for boys, and not enough for men. They are intended to prepare the way for the advanced treatises as far as subject matter goes; hence they have been of necessity technical, since none but a specialist tackles the treatises. Therefore, the present condition of the popular mind is due to a combination of the action of that antique doctrine, which asserted that the earlier stages of education were but preparation for more advanced stages, instead of being life, with an enthusiasm for science, which led its devotees to try adequately to prepare the younger generation for future joy in science by imparting to it as much of the great wealth of adult scientific knowledge as was possible in the limited time at their disposal.

But now that pernicious doctrine has departed, and the science enthusiasts are beginning to see that the greatest educational results cannot be attained by science in that way. It is gradually becoming clear that, for purposes of teaching, science must be treated as a part of human experience. It must be so closely linked with the interests and problems of the daily life as to become part of it; it must be shown to have arisen for the purpose of meeting human needs, and to have played a very important part in the development of

lars, provided no retiring allowance shall exceed ninety per cent of the active pay.

(b) "For an active pay greater than sixteen hundred dollars the retiring allowance shall equal one thousand dollars, increased by fifty dollars for each one hundred dollars of active pay in excess of sixteen hundred dollars.

(c) "No retiring allowance shall exceed three thousand dollars."

The retiring allowance of a professor retiring after twenty-five years of professorial service is computed as follows:

(a) "For an active pay of sixteen hundred dollars or less, a retiring allowance of eight hundred dollars, provided that no retiring allowance shall exceed eighty per cent of the active pay.

(b) "For an active pay greater than sixteen hundred dollars the retiring allowance shall equal eight hundred dollars, increased by forty dollars for each one hundred dollars of active pay in excess of sixteen hundred dollars.

(c) "For each additional year of service above twenty-five, the retiring allowance shall be increased by one per cent of the active pay.

(d) "No retiring allowance shall exceed three thousand dollars."

The rules of the Foundation also enable it to recognize "individual professors of merit, or of distinguished service" in institutions not on the accepted list. "Such allowances cannot be granted to professors in institutions deemed to be under denominational control."

In the case of teachers in an accepted institution, the Foundation deals with the institution

direct, not the professor; the professor receiving his retiring allowance just as he has received his salary, through the Treasurer of the institution.

PRESIDENT JUDSON continued :

With regard to the General Education Board of which I am a member, it had been hoped to have here today the Secretary, Mr. Wallace Buttrick, who has been the active officer of the Board and whose statement of the work would be authoritative and interesting. As he is unable to be here, I will present a few facts.

The work of the Board falls under three heads, namely, agricultural education, the development of secondary schools, and the development of colleges.

The purpose of agricultural education as fostered by the Board is strictly educational. The situation is this. In certain southern states rural schools are either entirely lacking or entirely inadequate. For such schools to be superimposed by an outside agency would have little social or educational value. Such schools to be a real power should be the product of the neighborhood, supported by the neighborhood because desired by the neighborhood. On investigation of the causes for the inadequate condition of these schools, it appears at once that the main reason is lack of ability to pay suitable taxes; in other words, the farmers are too poor to sustain local schools. The reason of this poverty, in the next place, appears to be the failure to use the most advanced methods of agriculture. It is believed by the Board that by adopting better modes of farming the economic condition of the poor farmers throughout many of

the southern states may be greatly improved. If this comes to be the case, it will result in greater power to pay taxes and in the ability and in the desire to sustain local schools. With this end in view the Board has been aiding in the extension of a knowledge of scientific farming throughout a number of the southern states with very encouraging results. Instead of trying to draw farmers to a central point for instruction, a number of farmers have been induced to try experiments under the direction of suitable agricultural authorities. Several thousand farmers in this way are really converting their farms into experiment stations in agriculture. They learn rapidly the practical results of the new methods and each such agency is a center of information which aids the entire vicinity. The Board believes that in this way it is doing a work which in the long run will prove useful to elementary education.

A number of southern states have heretofore been lacking in adequate systems of secondary schools. The board has been cooperating with the educational authorities in several states with a view to securing suitable legislation to remedy this difficulty. The results have been marked, and state after state has recently adopted a system of education which seems likely to prove of great importance in linking the elementary school with the college and the state university.

The work of the Board with regard to colleges is not limited to the south but is intended to cover the entire union. Thus far gifts have been made only for endowment. It has been thought wise on the whole to give this endowment as part of a con-

many abstract concepts, and the consequent deadening of the ability to perceive concrete realities, to see relationships among them, and to organize them by means of theories into more comprehensive groups.

4. Another misconception is that which leads the teacher to emphasize too early rigor and logic, at the expense of true scientific intuition and imagination. The pupil is a victim of this fallacy when he is required to prove something which he recognizes at once as true; as, for example, that all straight angles are equal. It is vigor, not rigor, that is needed in the elementary work.

5. A final serious fault in the present teaching of science is the failure to use the wealth of historical matter that is available. The educational value of a course in science may be greatly increased by studying the stories of her great men and discussing her services to mankind.

II. Under the second head, the following faults in school organization may be mentioned as especially harmful to the science teaching:

1. The break that still exists between the high-school and the college, due to a lack of mutual understanding between the high-school and the college teacher, and leaving the high-school teacher to frame his course to fit a set of requirements that are seldom in harmony with the requirements set by the needs and the natures of the high-school pupils.

2. The assignment of the work of teaching science to teachers who are not suitably prepared for it.

3. The failure of school authorities to recognize the fact that the preparation of demonstration lectures, the care of laboratory apparatus, and the inspection of note books require an enormous amount of time and energy over and above that required for the work in the library and the literature of the subject, which latter work the science teacher has in common with all the teachers of the other subjects. School authorities also fail to recognize the fact that an hour spent in laboratory teaching requires of the teacher as much preparation and as great an expenditure of energy as an average hour spent in classroom instruction.

4. The failure of the school authorities to recognize the fact that double periods are absolutely essential for laboratory work, whether in the laboratory or in the field.

5. The assignment of too many pupils to one laboratory section in charge of one instructor.

Whereas, The most pressing need for *higher education* in this country is a better understanding between the secondary schools and the colleges and universities in regard to requirements for admission; therefore

Resolved, That the Department of Secondary Education appoint a committee of five, * * * * whose duty it shall be to report at the next annual meeting a plan for the accomplishment of this end, so urgently demanded by the interests of *higher education*."

On page 9 of the report of this Committee on College Entrance Requirements, it is stated that the committee planned to do certain things "all with a view to the ultimate determination of what should constitute a normal requirement in each of the subjects set for the admission to college."

Again, on page 43 we read: "Acting on these lines, the committee has devoted its chief energies, through several years, to securing the formulation of satisfactory courses of study which should serve as units, or norms, worthy of national acceptance. * * * * In so far as the courses of study representing national units, or norms, may be adopted by the schools and colleges, great simplification will result in the subject of college entrance requirements, the subject specifically referred to this committee."

These passages from the report of this committee are introduced, not at all with the idea of belittling the very important work done by this committee, but merely to make clear one point which is of importance to the present discussion ; namely, that the whole subject of secondary school units or

norms was approached by it from the college entrance requirement point of view. The original committee and the sub-committees that framed this report consisted of seventy-two college men and thirty-four highschool principals and teachers. It was doubtless best at that time to present the new units to the schools in this form, in order to insure their speedy introduction. Certainly no one can deny that the college entrance requirements in general, and the report of this committee in particular, have been among the most powerful influences for good in the rapid uplifting of the secondary schools. For example, laboratory work in physics was early introduced into the schools largely because first Harvard, and then the other colleges, demanded it as an entrance requirement; and from this beginning, laboratory work in the other sciences has not only been generally introduced, but has now come to be regarded as a *sine qua non* of science teaching,—a perfectly evident educational advance.

The various stages of the advance from the chaotic system of entrance requirements and the uneven standards of the schools of fifteen years ago to the present fairly uniform system thus seem to have been these: 1. The establishment of type courses by the Committee of Ten, the emphasis as regards methods of teaching being placed by them on preparation for life. 2. The establishment for each subject of national units, or norms, from which the type courses could be built up, these units being framed to a considerable extent from the college entrance requirement point of view. 3. The gradual adoption and modification of the recommendations of these two committees, leading both to a

marked advance in the efficiency of the secondary schools, and to a decided broadening and increase in the flexibility of the college entrance requirements.

While this progress has been going on steadily on this mainly administrative side, educational theory has also advanced. In his admirable book on the Making of our Middle Schools (1903), Professor E. E. Brown rightly says (page 436) : "The keynote of current educational thought seems to have been sounded by Professor John Dewey in his saying that, *The school is not preparation for life, it is life.* Education is to provide for the future needs of the pupils by providing for their real present needs. One of the most notable and comprehensive tendencies of secondary education, and of all education, is accordingly the tendency to seek an understanding of the living growing persons who go to school; and to treat them in a way to promote their healthy growth. This doctrine is sound at bottom. Persons are the most precious things in all the world; and child persons are as precious as persons fully matured. In this view we have true humanism."

It seems fair to ask, then, whether the time has not now come to begin a discussion of the secondary school program, and of the methods of presenting the subject matter in it, from the point of view of the school regarding the school as the agency devised for the purpose not only of preparing boys and girls for the duties of later life, but also for the purpose of being the center of their present intellectual and social life. This ideal, it will be noticed, is a combination of the one defined by the

per year in order to count as a "unit" should not be less than the equivalent of 250 hours of sixty minutes each. No superior limit is given, but additional hours should not receive additional credit. If then the full number of units in a high school course be reckoned as sixteen, it should be possible for a boy desiring and electing it, to take six units in manual training, provided he takes ten units of academic work.

SYLLABUS OF UNITS IN SHOP-WORK.

1. *Bench Work in Wood.*

The theory and correct use of common tools, each being illustrated in its turn by one or more carefully selected exercises. Incidentally, the proper method of grinding and oil-stoning an edge-tool should be taught and learned; methods of laying out work from the use of figured drawings; methods of securely uniting parts by joints of various kinds—mortise-and-tenon, nailing, screwing, gluing, doweling, etc.; polishing, shellacking, staining, etc.; the use of wood-carving tools, engraving, relief carving and inlaying. All models and exercises should be made from drawings giving exact dimensions. These should be frequent synthetic constructions which embody the elements, as they are mastered.

Preferably, these constructions should be useful articles, well-proportioned, and some should admit of surface ornamentation. Soft woods should be followed by hard woods and the qualities of each should be noted.

encouragement of attendance at summer schools by the payment by school authorities of tuition and traveling expenses for those who go. 2. That colleges and normal schools offer free courses for teachers, for the benefit of those who work in their vicinity. 3. That the superintendent, or some teacher who has shown himself to be particularly efficient, give instruction to the teachers under each board's control.

The committee on College Entrance Requirements treat this problem in Resolution III, page 80. Their recommendation is: "That the teachers in the secondary schools should be college graduates, or have the equivalent of a college education."

It is perfectly clear that neither of these committees has gone very far in the solution of this all-important problem. It is true that two of the Conferences, namely, that on natural history, and that on geography, made, to the Committee of Ten, numerous valuable suggestions as to pedagogical methods and principles. Also the reports of the sub-committees on physical geography, chemistry, and botany, as printed in the Report of the Committee on College Entrance Requirements, contain some material of this sort. But all must agree that even these suggestions, valuable though they be, are not adequate to the task of teaching even a "college graduate" to teach efficiently, unless he has also had training in education, both theoretical and practical. Therefore this problem of the adequate preparation of teachers is the second ideal which was suggested by the Committee of Ten, but which has not yet been reached in practice. The further realization of this ideal, as far as science is concerned, is thus

standard steel lathe tools. In all exercises the sequence of steps is a matter of great importance.

4. Bench and Machine Metal-Fitting, one unit.

Centering for turning between centers; theory of metal-turning; forms of cutting tools and tool-grinding; turning cast-iron, wrought-iron, steel, and brass; use of oil, when needed; relation of speed to heat developed; use of taps and dies; screw-cutting; chuck-work, mandrill and face-plate work; drilling, slotting, planing, gear-cutting, and special work on the milling machine. Having mastered the elements, each student should combine more or less of such elements in a construction, made in accordance with original or selected drawings.

Before leaving the subject of shop-work, it may be well to submit a few suggestions to teachers of less experience than the members of this committee, in regard to methods of instruction:

1. The exposition of a tool and the demonstration of a process should be before the entire section of pupils conveniently seated so as to see all the teacher does, and hear all that he says.

2. The shop-period of first-year boys ought not to exceed one hundred minutes in length; but third and fourth year pupils can profitably have longer, but less frequent shop-periods; however, those periods should never exceed one hundred and eighty minutes.

3. Pupils should never be left to find out for themselves the proper ways of using a tool. The correct ways should be clearly and fully shown and explained. The use of a wrong tool, and the adop-

this movement among science teachers. And why should the teacher not have to be formally "admitted to the school" before teaching, even as the lawyer has to be formally "admitted to the bar" before practicing? And why are we all willing to sit complacently by while some bungling teacher administers sedative "dope", which often causes complete atrophy of some faculty of a child's mind, when we would shrink in horror at the thought of allowing an unlicensed doctor to administer drugs to the physical person of one of them? If teaching is really a dignified profession, then why not respect it enough ourselves to demand that those who would enter it should show the necessary qualifications for the work? Then, and then only, will we teachers rise in the respect of the public to the point where our salaries will begin to rise too.

IV. There is yet a fourth purpose in this work of the science teachers. Not only must the problem of the presentation of science be discussed from the point of view of youthful life; not only must there be made demands on the teacher before he is allowed to teach science; not only must there be a worthy method of formally entering the profession; but also, the qualified teachers must study together the problem of so broadening the scope and the methods of their teaching, that science will eventually come into its true heritage in the educational world. What does this mean, and how may it be done?

It is undoubtedly true that the study of science in the schools is popularly believed to be a pursuit adapted solely to the specialist. Have you never heard a parent say concerning his child's choice of

liminary statement of definitions in two important subjects of shop-work and drawing. We do not regard them as final, and we wish no one to regard them as a finalty. They are open to examination and improvement, and we invite suggestions from teachers. Another year, the committee should be prepared to make changes and additions of great value.

Respectfully submitted, signed by the five members present :

C. M. WOODWARD,
G. N. CARMAN,
CHAS. A. BENNETT,
J. A. PHILLIPS,
C. H. BAILEY.

The Commission on Accredited Schools reported progress. It was voted that the Association approve the report:

The following standing committees on definitions of units were continued by the Board of Inspectors for the coming year:

ENGLISH.

- F. N. Scott (Chairman) Professor of Rhetoric, University of Michigan.
University of Michigan, A. B., 1884, A. M., 1888, Ph. D., 1889.
J. T. Denney, Professor of English and Dean of the College of Arts,
Philosophy, and Science, Ohio State University.
University of Michigan, A. B., 1885.
J. W. McLane, Principal, Lincoln High School, Cleveland, Ohio.
Adelbert College, A. B., 1883, A. M., 1895.
Mary B. Mumford, Head of the Department of English, Detroit Home
and Day School, Detroit, Michigan.
Vassar College, A. B., 1894, Radcliffe College, A. M., 1900.
T. A. Clark, Professor of Rhetoric and Dean of Undergraduates, Uni-
versity of Illinois.
University of Illinois, B. L., 1890.
H. E. Giles, Principal, High School, Kewanee, Illinois.
Oberlin College, A. B.
W. F. Webster, Principal, East High School, Minneapolis, Minnesota.
University of Minnesota, A. B., 1886.

able to follow the work. The bulk of the curriculum was then made up of didactics, logic, mathematics, astronomy, and the philosophy and science of Aristotle. Classical literature was unknown. When, however, Aristotle's philosophy was discredited by modern science, the study of the great literatures of classical antiquity came to be regarded as the most efficient broadening studies. They became the fundamental studies in America because Harvard, in accordance with the educational conceptions prevalent at the time of its founding, made them the corner stone of its curriculum "dreading to leave an illiterate ministry to the churches, when our present ministers shall lie in the dust", as an ancient document puts it.

Nor was modern science at that time sufficiently well established to take a prominent part in education. In the early years at Harvard physics was taught two fifteen minute periods a week. But now conditions have changed; science has become the most prominent factor in our life and thoughts,—not only on the side of technical achievement, but also on that of thought processes and social life. This trend of thought toward the methods of science is now so far advanced, that President Eliot is reported to have declared that theology is now suffering from its failure to adopt and use those methods; and President Pritchett has stated that theological study should be made a branch of applied science, thereby classifying the divinity school with the medical and engineering schools—why not also with the schools of education?—in the university of the near future.

Encouraged by these signs of the recent drift

of opinion toward the adequate recognition of the power of science so to educate men that they would be not only well informed about the technique of their environment, but also thoroughly broad and cultured, science teachers have been gradually waking up to the increased responsibilities of their profession. This fact is shown by the recent establishment of a considerable number of science teachers' associations, whose work consists in discussing the problems of science teaching.

It is not so very long since most educators believed that the tree of culture was indigenous to the territory of the humanities and would flourish only in their soil. They then believed, as the popular mind seems yet to believe, that only useful things, like potatoes, onions, and cabbages, would grow in scientific soil. So the garden of learning was partitioned by a high wall, on one side of which, surrounding the tree of culture, grew only those plants that were primarily beautiful and inspiring—the humanities: while on the other side grew only those plants that were primarily neither beautiful nor ideal, but only useful—the sciences. It was further conceded that neither species would flourish well on the other side of the wall; and, in particular, it was regarded as certain that the useful plants would not flourish under the shade of the tree of culture, but required for their support the bright sunshine of the world about them.

Fortunately, this state of things no longer exists. Some good wind blew a few seeds from the garden of the sciences over into that of the humanities: and they grew. The humanities began to realize that there was a training in mental power

through the use of the scientific method going on over the wall. They began to sit up and pay attention, and have finally ended by claiming as their own the greatest of science's former claims to a position in the curriculum; namely, training in scientific methods of observation and thought. The result is that we are now told that research in the humanities, even in the classics, leads to the same exercise in scientific methods as does research in the sciences—barring only the acquirement of utilitarian knowledge and of the ability to predict. Thus the humanities have not been slow to recognize the power and the value of the methods of science, and to try to adapt them to their own work.

And this has been a good thing all around. The humanities are better because of it, and the manipulation of that great and mighty tool of science,—its method,—is gradually coming to be understood outside of strictly scientific circles. But has science taken anything from the humanities in return for this? Have any seeds from the garden of the humanities blown over the wall and taken root on the scientific side. Not to any appreciable extent as yet. But the wall between the gardens is getting old and feeble; and the other night a few bad boys broke a hole in it, cut a few sprouts from the tree of culture, and planted them on the scientific side. These sprouts seem to be flourishing finely. And why should they not, since the gardens are adjacent, and the soil on both sides of the wall is all part of the great human experience?

This may serve to make clear the fourth ideal for whose further realization the science teachers are now striving. They wish to try to make good

the claim that modern science, when properly presented, is able to give an education that is at least no less broad and valuable than that derived from the humanities. They want to find out what are the broadening and vitalizing educational elements of the humanities. They are trying to understand why science has neglected these elements until now, and how they may be adapted to her use. For they now begin to see clearly that there are not two separate, sharply contrasted bodies of information, the learning of one or the other of which constitutes education ; but rather, that there is one great, tangled mass, consisting of human experiences and human interpretations of human experiences, and that he alone is broadly educated who is able to disintangle and perceive the beauty in some tiny fraction of that mass, without at the same time severing its connection with the whole of which it is but a part.

The teachers in America are not alone in this. That the problem is not a local or an ephemeral one is shown by the fact that this movement for its solution is not limited to a small section of any country. It is an international movement. Thus in Germany, in 1902, the German government issued a decree stating that henceforth the graduation certificates of any one of the three types of German secondary school would be accepted by the government as standing for equal educational attainments. Entrance to the Universities of Germany is now granted on the diploma of the science schools, as well as on that of the classical ones.

The effect of this decree was to arouse the science teachers to their opportunities and to their

responsibilities. They at once started an earnest and thorough investigation of the present methods of teaching science, and of the place of science in the curriculum. This investigation has been conducted by a commission of twelve members appointed by the German Association of Physicians and Natural Scientists. This commission has issued two reports in which are set forth the principles of correct science teaching, together with syllabi for the various sciences and a schedule of hours for the different schools.

In France, in like manner, the government decreed, in 1902, that but one kind of bachelor's degree, the B. A., should hereafter be given in France. This amounts to recognizing the largely scientific courses as of equal educational value with the largely classical and literary courses. The result in this case was to call forth a series of essays by some of the leading French scientists on the proper methods of teaching science. As one of their number has stated it, the effect of this decree on the sciences is that instead of being "treated as materials for examinations, they may now become instruments of culture." The whole agitation there has had the effect of greatly increasing the power of science in the schools. Thus Germany and France have officially recognized the fact that scientific study should have, over and above any utilitarian returns, an educational value at least as great as that possessed by the humanities.

If it is true that science is popularly believed to be technical and utilitarian, it is but fair to ask whether this belief is well-grounded. There can be little doubt in the mind of anyone who looks through

- F. L. Smart**, Assistant Superintendent and Principal of High School,
Dubuque, Iowa.
Harvard University, A.B., 1896.
- Raymond Weeks**, Professor of Romance Languages, University of
Missouri.
Harvard University, A.B., 1890; A.M., 1891; Ph.D., 1897.

PHYSICS

- C. R. Mann** (Chairman), Assistant Professor of Physics, University of
Chicago, Chicago, Illinois.
Columbia University, A.B., 1890, A.M., 1891; University of
Berlin, Ph.D., 1895.
- A. D. Cole**, Professor of Physics, Ohio State University.
Brown University, A.B., 1884, A.M., 1887.
- Seth Hayes**, Principal of High School, Lancaster, Ohio.
Ohio State University, B.Sc., 1892.
- C. W. Greene**, Professor of Physics, Albion College, Albion, Michigan.
University of Michigan, A.M., 1905; Michigan State Normal College,
B.Pd., 1905.
- C. F. Adams**, Head of Department of Science, Central High School,
Detroit, Michigan.
Amherst College, A.B., 1877, A.M., 1884.
- C. H. Smith**, Teacher of Physics, Hyde Park High School, Chicago.
Cornell University, M.E., 1885.
- C. W. Treat**, Professor of Physics, Lawrence University, Appleton,
Wisconsin.
De Pauw University, Ph.B., 1890, A.M., 1893.
- H. L. Terry**, State Inspector of High Schools, Madison, Wisconsin.
- F. S. Jones**, Professor of Physics and Dean of the College of Engineering,
University of Minnesota.
Yale University, A.B., 1884. A.M., 1890.
- E. F. Smith**, Teacher of Physics, Humboldt High School, St. Paul,
Minnesota.
University of Minnesota, B.L., 1894.
- K. E. Guthe**, Professor of Physics, State University of Iowa.
University of Marburg, Ph.D., 1892.
- S. L. Thomas**, Principal, High School, Council Bluffs, Iowa.
- O. M. Stewart**, Professor of Physics, University of Missouri.
De Pauw University, Ph.B., 1892; Cornell University, Ph.D., 1897.
- F. H. Ayres**, Head of Department of Science in Central High School,
Kansas City, Missouri.
- J. E. Almy**, Assistant Professor of Physics, University of Nebraska.
University of Nebraska, B.Sc., 1896, A.M., 1897; University of
Berlin, Ph.D., 1900.
- H. M. Garrett**, Teacher of Science in High School, Beatrice, Nebraska.
University of Nebraska, A.B., 1902.
- H. I. Woods**, Professor of Physics and Astronomy, Washburn College,
Topeka, Kansas.
Lafayette College, A.B., 1895, A.M., 1898.

more of them will be found to apply in some of the science work in every school.

I. Under the first of the general heads just mentioned, the following misconceptions are pointed out as being the most damaging to the teaching of the elementary phases of science:

1. The notion that the acquisition of knowledge is the chief end of science teaching, in contradistinction to the idea that in the process of acquiring scientific knowledge there should be developed in the student the proper habits of acquisition, to be used in problems yet unsolved, and a right attitude toward knowledge in general. The subject-matter used in the science courses furnishes the opportunity of acquiring a considerable amount of valuable knowledge; but the highly important thing is that it be so presented as to foster the development of the proper attitude of mind. In elementary science courses, this latter end usually involves the former, while the reverse is not necessarily true. The best educational results of science teaching are secured only when topics are recognized as problems and treated accordingly. This misconception leads examining boards to expect mastery of subject-matter only from the student, and often forces the teacher to present his science in a deductive and authoritative way, and to teach by didactic methods which are quite at variance with the spirit of science.

2. The notion that the laws of science are final, in contradistinction to the idea that a scientific law is some man's interpretation of an unvarying phenomenon of Nature. This misconception leads the teacher to try to make the pupil verify another man's interpretation of phenomena, instead of allowing him to make his own interpretation. In this way again thinking power and the development of the creative imagination is sacrificed to memory drill.

3. The notion that the elementary science teaching, like the more advanced, should lead to an ability to describe modern scientific theories and up-to-date speculations, in contradistinction to the idea that it should develop a mastery over facts and their relations, a power of interpreting those relations in theories and hypotheses, and ability to apply the knowledge thus acquired. This misconception leads the student, who could not run a furnace or describe a heating plant intelligently, yet to believe that he knows something about heat, because he has been taught to define it as the kinetic energy of the molecules. This fallacy is responsible for the too early introduction of

issuance of the present report, which embodies some few modifications of the preliminary report.

Respectfully submitted,

O. W. CALDWELL, Botany,
State Normal School, Charleston, Ill.

C. E. COMSTOCK, Mathematics,
Bradley Polytechnic, Peoria, Ill.

H. E. GRIFFITH, Chemistry,
Knox College, Galesburg, Ill.

C. R. MANN, Physics,
University of Chicago.

C. E. PEET, Physical Geography,
Lewis Institute, Chicago, Ill.

J. REIGHARD, Zoölogy,
University of Michigan, Ann Arbor, Mich.

Dean C. M. Woodward of Washington University then presented the following preliminary report of the Committee on the Definition of a Unit in Manual Training :

PRELIMINARY REPORT OF THE COMMITTEE ON SHOP-WORK AND DRAWING IN SECONDARY SCHOOLS

Five members of your committee appointed a year ago to formulate and submit definitions of units of work in the two departments of manual training, met yesterday to compare notes and to prepare at least a preliminary report. In spite of the fact that manual training is relatively new, and no committee of ten or fifteen has ever formulated its definitions, your committee are in substantial agreement.

When we look into the condition of our high

schools in the Central West, we find great diversity. The city schools make one class and the rural high schools another class—and we see at once that what is possible and reasonable for the former, is generally beyond the ability of the latter in the way of installing and maintaining manual training. Fortunately, the greater includes the less, and a school which cannot offer and deliver all that we define below, can, at least, go as far in that direction as its circumstances will allow.

We have, therefore, defined shop-work and drawing, as it exists, or should exist, in a well-organized and fully equipped city manual training high school. If for any reason a high school undertakes less than the full amount we specify, we recommend that it take up subjects in the order we name them and cover the ground thoroughly, as far as it goes. A high school is not, and can not be, a high-grade technical school, and nothing is gained by skipping the broad foundations of manual and graphic culture and attempting prematurely to do engineering work.

The committee do not feel called upon to defend, by arguments, their estimate of the proper allowance of time and credit to shop-work and drawing, nor the content of their definitions, though successful defense were easy.

The committee recommend that a manual training, or a mechanic arts, high school, covering four full years, should be at liberty to devote two-fifths of the school hours to shop-work and drawing; that is to say, twelve hours (or periods) per week on the average should be allowed, eight to shop-work and four to drawing. The minimum time given

per year in order to count as a "unit" should not be less than the equivalent of 250 hours of sixty minutes each. No superior limit is given, but additional hours should not receive additional credit. If then the full number of units in a high school course be reckoned as sixteen, it should be possible for a boy desiring and electing it, to take six units in manual training, provided he takes ten units of academic work.

SYLLABUS OF UNITS IN SHOP-WORK.

1. *Bench Work in Wood.*

The theory and correct use of common tools, each being illustrated in its turn by one or more carefully selected exercises. Incidentally, the proper method of grinding and oil-stoning an edge-tool should be taught and learned; methods of laying out work from the use of figured drawings; methods of securely uniting parts by joints of various kinds—mortise-and-tenon, nailing, screwing, gluing, doweling, etc.; polishing, shellacking, staining, etc.; the use of wood-carving tools, engraving, relief carving and inlaying. All models and exercises should be made from drawings giving exact dimensions. These should be frequent synthetic constructions which embody the elements, as they are mastered.

Preferably, these constructions should be useful articles, well-proportioned, and some should admit of surface ornamentation. Soft woods should be followed by hard woods and the qualities of each should be noted.

2. Wood Turning and Elementary Metal Work.

The theory of turning, the relation of grain to cutting edges ; practice in turning between centers, face-plate, and chuck turning ; free curves, convex and concave ; the construction of boxes, trays, and art forms, using soft and hard woods ; built-up stock ; a construction involving turning and joinery.

Metal Working.

Working in a variety of metals, including cast-iron, steel, brass, tin, zinc, and copper ; the care and use of the hand lathe and fundamental hand tools of metal working, specifically as follows:

Chipping, filing, fitting, drilling, hand-tool turning, tap and die work, hardening and tempering steel, metal spinning, construction in sheet-metal ; raising, soldering, and brazing.

3. Pattern Making, Molding and Forging.

The theory and use of patterns, how built, how divided, and why ; pattern-making, bench-molding, of simple and complex patterns ; theory and use of cores, construction of cores and core prints ; casting with plaster, lead or alloys ; the final piece being hollow-work (like a steam cylinder with ports, etc.) made from original drawings.

Forging—Iron and Steel.

Construction and management of the forge—fundamental processes ; drawing, up-setting, bending, punching, splitting, welding, hardening ; shaping steel under the hammer ; tempering of different grades ; the construction of chains, hooks and forge tools and wrought-iron articles from original or selected designs ; finally the manufacture of a set of

standard steel lathe tools. In all exercises the sequence of steps is a matter of great importance.

4. *Bench and Machine Metal-Fitting, one unit.*

Centering for turning between centers; theory of metal-turning; forms of cutting tools and tool-grinding; turning cast-iron, wrought-iron, steel, and brass; use of oil, when needed; relation of speed to heat developed; use of taps and dies; screw-cutting; chuck-work, mandrill and face-plate work; drilling, slotting, planing, gear-cutting, and special work on the milling machine. Having mastered the elements, each student should combine more or less of such elements in a construction, made in accordance with original or selected drawings.

Before leaving the subject of shop-work, it may be well to submit a few suggestions to teachers of less experience than the members of this committee, in regard to methods of instruction:

1. The exposition of a tool and the demonstration of a process should be before the entire section of pupils conveniently seated so as to see all the teacher does, and hear all that he says.

2. The shop-period of first-year boys ought not to exceed one hundred minutes in length; but third and fourth year pupils can profitably have longer, but less frequent shop-periods; however, those periods should never exceed one hundred and eighty minutes.

3. Pupils should never be left to find out for themselves the proper ways of using a tool. The correct ways should be clearly and fully shown and explained. The use of a wrong tool, and the adop-

tion of an illogical or unscientific procedure should at once be checked, and the error should be plainly pointed out.

SYLLABUS OF THE DRAWING UNITS.

First half unit.

Freehand sketches and mechanical drawings of simple objects or machine parts in orthographic projection. Top, front, end, and sectional views.

Freehand lettering.

Tracing.

Blue printing.

Second half unit.

Elementary problems in third-angle projection.

Representation of the point, line, and plane sections, intersections and developments.

Working drawings of objects to be made in the shop.

Isometric and cabinet drawing.

Simple architectural drawings, plans, elevations, and details.

Third half unit.

Mechanical perspective.

Freehand drawing in perspective.

Construction of conic sections and helix.

Machine drawing.

Line Shading.

Tinting.

Fourth half unit.

Architectural drawing. A study of historic ornament.

Mechanical lettering.

The undersigned submit the above as a pre-

liminary statement of definitions in two important subjects of shop-work and drawing. We do not regard them as final, and we wish no one to regard them as a finalty. They are open to examination and improvement, and we invite suggestions from teachers. Another year, the committee should be prepared to make changes and additions of great value.

Respectfully submitted, signed by the five members present:

C. M. WOODWARD,
G. N. CABMAN,
CHAS. A. BENNETT,
J. A. PHILLIPS,
C. H. BAILEY.

The Commission on Accredited Schools reported progress. It was voted that the Association approve the report:

The following standing committees on definitions of units were continued by the Board of Inspectors for the coming year:

ENGLISH.

- F. N. Scott (Chairman) Professor of Rhetoric, University of Michigan.
University of Michigan, A. B., 1884, A. M., 1888, Ph. D., 1889.
J. T. Denney, Professor of English and Dean of the College of Arts,
Philosophy, and Science, Ohio State University.
University of Michigan, A. B., 1885.
J. W. McLane, Principal, Lincoln High School, Cleveland, Ohio.
Adelbert College, A. B., 1883, A. M., 1896.
Mary B. Mumford, Head of the Department of English, Detroit Home
and Day School, Detroit, Michigan.
Vassar College, A. B., 1894, Radcliffe College, A. M., 1900.
T. A. Clark, Professor of Rhetoric and Dean of Undergraduates, Uni-
versity of Illinois.
University of Illinois, B. L., 1890.
H. E. Giles, Principal, High School, Kewanee, Illinois.
Oberlin College, A. B.
W. F. Webster, Principal, East High School, Minneapolis, Minnesota.
University of Minnesota, A. B., 1886.

- H. M. Belden, Professor of English, University of Missouri.
 Trinity (Hartford), A. B., 1888; Johns Hopkins University,
 Ph. D., 1895.
- E. M. Hopkins, Professor of Rhetoric and English Language, Uni-
 versity of Kansas.
 Princeton University, A. B., 1888, Ph. D., 1894.
- W. W. Stoner, Superintendent of City Schools, York, Nebraska.
 Otterbein University (Ohio), A. B., 1893.
- F. G. Hubbard, Professor of the English Language, University of
 Wisconsin.
 Williams, A. B., 1880; Johns Hopkins, Ph. D., 1887.
- Harry E. Coblenz, Head of the Department of English, South Divi-
 sion High School, Milwaukee, Wisconsin.
 University of Indiana, A. B., 1894; Lake Forrest University,
 A. M., 1899.
- James Lawrence Lardner, Head of the Department of English and
 Oratory; Dakota Wesleyan University, Mitchell, South
 Dakota.
 Wabash College, Crawfordsville, Indiana, B. S., 1896; Graduate
 School of Oratory, Northwestern University, 1900.
- W. L. Cochrane, Superintendent of City Schools, Aberdeen, South
 Dakota.
 Kirksville State Normal School (Missouri), B. P., 1900.
- C. F. Ansley, Professor of English, State University of Iowa.
 University of Nebraska, A. B., 1890.
- George P. Koebel, Teacher of English in High School, Clinton, Iowa.
 Iowa State University, A. B., 1906.
- B. F. Kizer, Director of English, Manual Training High School,
 Kansas City, Missouri.
 Wittenberg College, Springfield, Ohio, A. B., A. M.
- V. L. Parrington, Professor of English Literature, University of Ok-
 lahoma.
 Harvard University, A. B., 1893.

MATHEMATICS.

- C. E. Comstock (Chairman), Professor of Mathematics, Bradley Poly-
 technic Institute, Peoria, Illinois.
 Knox College, A. B., 1888; A. M., 1891.
- H. Hancock, Professor of Mathematics, University of Cincinnati.
 Berlin University, Ph. D.; Paris, D. Sc.
- J. L. Markley, Junior Professor of Mathematics, University of
 Michigan.
 Harvard College, A. B., 1885; Harvard University, A. M., 1887;
 Ph. D., 1889.
- A. Darnell, Head of the Department of Mathematics, Central High
 School, Detroit, Michigan.
 University of Michigan, Ph. B., 1898.
- H. E. Slaught, Assistant Professor of Mathematics, University of
 Chicago.
 Colgate University, A. B., 1883, A. M., 1886; University of Chicago,
 Ph. D., 1898.

- J. F. Downey**, Professor of Mathematics and Dean of the College of Science, Literature and Arts, University of Minnesota.
 Hillsdale College, A. M. 1877; College of Pennsylvania, C. E. 1878.
- W. A. Bartlett**, Principal, High School, Winona, Minnesota.
 Iowa State Normal (Cedar Falls), B. D. 1883; Iowa College, B. S.; 1887, A. M., 1890.
- W. D. Wells**, Principal, High School, Davenport, Iowa.
 Iowa State College, B. Sc., 1883.
- E. R. Hedrick**, Professor of Mathematics, University of Missouri.
 University of Michigan, A. B. 1896; Harvard University, A. M. 1898, Goettigen, Ph. D., 1901.
- L. I. Cammack**, Principal, Central High School, Kansas City, Missouri.
 Earlham College, B. S., 1884.
- E. B. Skinner**, Assistant Professor of Mathematics, University of Wisconsin.
 Ohio University, A. B., 1888; University of Chicago, Ph. D., 1900.
- A. L. Candy**, Associate Professor of Mathematics, University of Nebraska.
 University of Kansas, A. B., 1892, A. M., 1893; University of Nebraska, Ph. D., 1898.
- A. R. Congdon**, Teacher of Mathematics, Omaha High School.
 University of Nebraska, B. Sc., 1899.
- H. B. Newson**, Professor of Mathematics, University of Kansas.
 Ohio Wesleyan University, B. S., 1883, A. M., 1891, Ph. D., 1891.
- A. M. Bogle**, Teacher of Mathematics, Kansas City (Kansas), High School.
 Muskingum College, A. B., 1880, A. M., 1883.
- G. W. Nash**, President, Northern Normal and Industrial School,
 Aberdeen, South Dakota.
 Yankton College, B. S., M. S.
- J. D. Harlor**, Head of Department of Mathematics, East High School,
 Columbus, Ohio.
 Ohio State University, B. A., 1895.
- S. W. Reaves**, Professor of Mathematics, University of Oklahoma.
 University of North Carolina, B. S., 1898; Cornell University, A. B., 1900.

HISTORY

- J. A. James** (Chairman), Professor of History, Northwestern University.
 University of Wisconsin, B. L., 1888; Johns Hopkins University, Ph. D., 1893.
- H. E. Bourne**, Professor of History, Western Reserve University.
 Yale University, B. A., 1883, B. D., 1887.
- H. V. Hotchkiss**, Superintendent of Public Schools, Akron, Ohio.
 Allegheny College, A. B., 1884, A. M., 1887, Ph. D., 1896.
- W. Cook**, Principal, Saginaw High School, Saginaw, Michigan.
 University of Michigan, A. M., 1886, Ph. D., 1887.
- H. V. Church**, Principal, J. Sterling Morton High School, Clyde, Illinois.
 University of Chicago, Ph. B., 1894.

- D. C. Munro, Professor of European History, University of Wisconsin.
 Brown University, A. M., 1890.
- W. C. Howe, Instructor in History, West Division High School,
 Milwaukee, Wisconsin.
- W. M. West, Professor of History, University of Minnesota.
 University of Minnesota, B. A., 1879, M. A., 1881.
- W. T. Couper, Teacher of History and Civics, East High School,
 Minneapolis, Minnesota.
 Hamilton College, B. A., 1892, M. A., 1893; University of Minnesota, LL. B., 1905.
- H. H. Freer, Professor of Economics and Sociology, Cornell College,
 Mt. Vernon, Iowa.
 Cornell College, A. B., 1880, A. M., 1883.
- W. R. Smith, Instructor in American History, Washington University,
 St. Louis, Missouri.
 Missouri Valley College, Ph. B., 1899; University of Chicago, Ph. M., 1901.
- N. W. Lambkin, Teacher of History, High School, Clinton, Missouri.
- H. W. Caldwell, Professor of American History and Politics, University of Nebraska.
 University of Nebraska, Ph. B., 1880, A. M., 1894.
- Manda J. Sundeau, Teacher of History, High School, Lincoln, Nebraska.
 Nebraska University, B. A., 1898.
- W. C. Abbott, Professor of European History, University of Kansas.
 Wabash College, A. B., 1892, A. M., 1893; Oxford University, B. Litt., 1897.
- C. H. Rhodes, Principal, High School, Winfield, Kansas.
 University of Kansas, A. M., 1905.
- W. W. Girton, Teacher of Civics, State Normal School, Madison, South Dakota.
- J. S. Ellis, Lake Preston, South Dakota.
 A. B., University of Nebraska, 1902.
- J. S. Buchanan, Professor of History, University of Oklahoma.
 Cumberland University, B. S.

LATIN AND GREEK

- E. W. Coy (Chairman), Principal of Hughes High School, Cincinnati, Ohio.
 Brown University, A. M., 1885; Princeton University, Ph. D., 1886.
- J. H. Drake, Junior Professor of Latin and Roman Languages, University of Michigan.
 University of Michigan, A. B., 1885; Ph. D., 1900; LL. B., 1902.
- David Mackenzie, Principal of Central High School, Detroit, Michigan, University of Michigan, A. M., 1881.
- W. R. Bridgman, Professor of Greek, Lake Forest College, Lake Forest, Illinois.
 Yale University, B. A., 1881. M. A., 1891; Maine University, M. A., 1891.

- J. S. Brown, Superintendent of Township High School, Joliet, Illinois.
 Denison University, A. B., 1889; Blandaile College, A. M., 1891.
- M. A. Slaughter, Professor of Latin, University of Wisconsin.
 De Pauw University, A.B., 1883; Johns Hopkins University, Ph. D., 1891.
- Nora Frye, Teacher of Latin, High School, Stillwater, Minnesota
 University of Minnesota, B. A., 1901.
- J. H. T. Main, President of Iowa College, Grinnell, Iowa.
 Johns Hopkins University, Ph. D., 1892.
- L. M. McAfee, President of Park College, Parkville, Missouri.
 Park College, A.B., 1880, A.M., 1887; Knox College, LL.D., 1903.
- W. C. Gunnerson, Teacher of Latin and Greek, Yeatman High School,
 St. Louis, Missouri.
 Indiana University, A.B., 1898, A.M., 1899; University of Chicago,
 Ph.D., 1904.
- G. E. Barber, Professor of Roman History and Literature, University
 of Nebraska.
 Hiram College, A.B., 1871, A.M., 1874.
- Grace I. Bridge, Head of the Department of Latin, High School,
 Lincoln, Nebraska.
 University of Nebraska, A.B., 1895.
- W. J. Greer, Professor of Latin, Washburn College, Topeka, Kansas.
 Miami University, A.B., 1889, A.M., 1893.
- R. R. Price, Superintendent of City Schools, Hutchinson, Kansas.
 University of Kansas, A.B., 1867; Harvard University, A.B., 1800,
 A.M., 1901.
- A. Strachan, Superintendent of Schools and Principal of High School,
 Deadwood, South Dakota.
 University of Rochester, A.B., 1880, A.M., 1882.
- Edward Rissman, Principal of the South Division High School, Mil-
 waukee, Wisconsin.
 University of Wisconsin, A.M.

GERMAN

- Laurence Fossler (Chairman), Professor of Germanic Languages and
 Literatures, University of Nebraska.
 University of Nebraska, A.M., 1889.
- W. W. Davies, Professor of German, Ohio Wesleyan University.
 Ohio Wesleyan University, A.B., 1872; Drew Theological Sem-
 inary, B.D., 1874; University of Halle, M.A., Ph.D., 1878.
- A. Keifer, Teacher of German, High School, Piqua, Ohio.
- M. Winkler, Professor of German Language and Literature, University
 of Michigan.
 Harvard University, A.B., 1889; University of Michigan, Ph.D.,
 1892.
- P. Huber, Superintendent of School, Saginaw, W. S., Michigan.
- P. O. Kern, Assistant Professor of Germanic Philology, University of
 Chicago.
 University of Chicago, Ph.D., 1897.

- Jessie L. Jones**, Assistant Professor of German, Lewis Institute, Chicago.
Doane College, A.B., 1884; University of Chicago, Ph.D., 1897.
- A. R. Hohlfeld**, Professor of German; University of Wisconsin, Leipzig, Ph.D., 1888.
- Elizabeth A. Waters**, Principal, High School, Fond du Lac, Wisconsin, University of Wisconsin, B.S.
- Elida C. Kirchner**, Teacher of German, Central High School, St. Louis, Missouri.
Washington University, A.B., 1899; University of Missouri, M.A., 1902.
- Emilie S. Hamm**, Teacher of German, High School, Beatrice, Nebraska.
- W. H. Carruth**, Professor of German Language and Literature, University of Kansas.
University of Kansas, A.B., 1880, A.M., 1889; Harvard University, Ph.D., 1893.
- Harriet Kemp**, Teacher of German, High School, Junction City, Kansas.
Baker University, A.B., 1901.
- Elizabeth Reid**, Instructor in German, Huron College, Huron, South Dakota.
Wooster University, Ph.B.
- Hermine R. König**, Instructor in German, North Side High School, Minneapolis, Minnesota.
- J. B. Knoepfler**, Professor of German, Iowa State Normal, Cedar Falls, Iowa.

FRENCH AND SPANISH

- B. L. Bowen** (Chairman), Professor of Romance Languages, Ohio State University.
University of Rochester, A.B., 1881; Johns Hopkins University, Ph.D., 1888.
- C. W. Benton**, Professor of French Language and Literature, University of Minnesota.
Yale University, B.A., M.A., 1874; Western University of Pennsylvania, Litt.D., 1897.
- Marie Dehnst**, Professor of German and French, Kingfisher College, Kingfisher, Oklahoma.
- J. R. Effinger**, Junior Professor of French, University of Michigan.
University of Michigan, Ph.D., 1898.
- Eugénie Galloo**, Professor of Romance Languages and Literatures, University of Kansas.
University of Michigan, B.L., 1892; University of Kansas, A.M., 1896.
- Alfred Nonnez**, Teacher of French, Walnut Hills High School, Cincinnati, Ohio.
Lycée of Bordeaux, Bachelier ès lettres.
- T. E. Oliver**, Professor of Romance Languages, University of Illinois.
Harvard University, A.B., 1898; Heidelberg, A.M., Ph.D., 1899.

- F. L. Smart, Assistant Superintendent and Principal of High School,
Dubuque, Iowa.
Harvard University, A.B., 1896.**
- Raymond Weeks, Professor of Romance Languages, University of
Missouri.
Harvard University, A.B., 1890; A.M., 1891; Ph.D., 1897.**

PHYSICS

- C. R. Mann (Chairman), Assistant Professor of Physics, University of
Chicago, Chicago, Illinois.
Columbia University, A.B., 1890, A.M., 1891; University of
Berlin, Ph.D., 1895.**
- A. D. Cole, Professor of Physics, Ohio State University.
Brown University, A.B., 1884, A.M., 1887.**
- Seth Hayes, Principal of High School, Lancaster, Ohio.
Ohio State University, B.Sc., 1892.**
- C. W. Greene, Professor of Physics, Albion College, Albion, Michigan.
University of Michigan, A.M., 1905; Michigan State Normal Col-
lege, B.Pd., 1905.**
- C. F. Adams, Head of Department of Science, Central High School,
Detroit, Michigan.
Amherst College, A.B., 1877, A.M., 1884.**
- C. H. Smith, Teacher of Physics, Hyde Park High School, Chicago.
Cornell University, M.E., 1885.**
- C. W. Treat, Professor of Physics, Lawrence University, Appleton,
Wisconsin.
De Pauw University, Ph.B., 1890, A.M., 1893.**
- H. L. Terry, State Inspector of High Schools, Madison, Wisconsin.**
- F. S. Jones, Professor of Physics and Dean of the College of Engineer-
ing, University of Minnesota.
Yale University, A.B., 1884. A.M., 1890.**
- E. F. Smith, Teacher of Physics, Humboldt High School, St. Paul,
Minnesota.
University of Minnesota, B.L., 1894.**
- K. E. Guthe, Professor of Physics, State University of Iowa.
University of Marburg, Ph.D., 1892.**
- S. L. Thomas, Principal, High School, Council Bluffs, Iowa.**
- O. M. Stewart, Professor of Physics, University of Missouri.
De Pauw University, Ph.B., 1892; Cornell University, Ph.D., 1897.**
- F. H. Ayres, Head of Department of Science in Central High School,
Kansas City, Missouri,**
- J. E. Almy, Assistant Professor of Physics, University of Nebraska.
University of Nebraska, B.Sc., 1896, A.M., 1897; University of
Berlin, Ph.D., 1900.**
- H. M. Garrett, Teacher of Science in High School, Beatrice, Nebraska.
University of Nebraska, A.B., 1902.**
- H. I. Woods, Professor of Physics and Astronomy, Washburn College,
Topeka, Kansas.
Lafayette College, A.B., 1895, A.M., 1898.**

- A. J. Stout**, Teacher of Science in High School, Topeka, Kansas.
- L. E. Akeley**, Professor of Physics, University of South Dakota.
Rochester University, B. A., 1888, M. A., 1888.
- W. A. Thompson**, Superintendent of Public Schools, Webster, South Dakota.
Indiana University, A. B., 1904.
- John Dewey**, Professor of Philosophy, Columbia University, New York, New York.
University of Vermont, A. B., 1879; Johns Hopkins University, Ph. D., 1884; University of Wisconsin, LL.D., 1904.
- Paul H. Hanus**, Professor of the History and Art of Teaching, Harvard University, Cambridge, Massachusetts.
- George H. Mead**, Professor of Philosophy, University of Chicago, Chicago, Illinois.
- M. Vincent O'Shea**, Professor of the Science and Art of Education, University of Wisconsin, Madison, Wisconsin.
Cornell University, B. L., 1902.

PHYSICAL GEOGRAPHY

- C. E. Peet** (Chairman), Assistant Professor of Geology and Geography,
Lewis Institute, Chicago.
University of Wisconsin, B. S., 1892.
- G. D. Hubbard**, Assistant Professor of Geology, Ohio State University.
University of Illinois, B. S., 1896, M. S., 1898; Harvard University,
A. M., 1901; Cornell University, Ph. D., 1906.
- A. F. Foerste**, Teacher of Science, Steele High School, Dayton, Ohio.
Denison University A. B., 1887; Harvard University, A. M., Ph.
D., 1890.
- C. A. Jewell, Jr.**, Teacher of Science, Central High School, Grand
Rapids, Michigan.
Michigan Agricultural College, B. S.
- W. W. Atwood**, Instructor in Physiography and Geology, University
of Chicago.
University of Chicago, B. S., 1897, Ph. D., 1903.
- G. L. Collie**, Professor of Geology and Dean, Beloit College, Beloit,
Wisconsin.
Beloit College, B. S.; Harvard University, Ph. D.
- C. E. Long**, Principal, High School, Marinette, Wisconsin.
University of Wisconsin, B. S., 1902.
- C. W. Hall**, Professor of Geology and Mineralogy, University of Min-
nesota.
University of Minnesota, B. A., 1871, M. A., 1873.
- W. F. Kunze**, Superintendent of Schools, Red Wing, Minnesota.
University of Minnesota, B. S., 1897.
- W. H. Norton**, Professor of Geology, Cornell College, Mt. Vernon,
Iowa.
Cornell College, A. B., 1875, A. M., 1878.
- H. H. Savage**, Superintendent of Schools, East Waterloo, Iowa.
University of Iowa, Ph. B.

- C. F. Marbut**, Professor of Geology, University of Missouri.
University of Missouri, B.S., 1889; Harvard University, A.M., 1904.
- P. Graves**, Teacher of Physical Geography and Geology, Central High School, Kansas City, Missouri.
- G. F. Kay**, Assistant Professor of Geology and Mineralogy, University of Kansas.
University of Toronto, A. B., 1900, A. M., 1902.
- W. L. Enfield**, Teacher of Science, High School, Wichita, Kansas.
- E. C. Perisho**, Professor of Geology of University of South Dakota, and State Geologist.
- G. E. Condra**, Associate Professor of Geography and Economic Geology, University of Nebraska.
University of Nebraska, B. S., 1896, A. M., 1898, Ph. D., 1901.
Earlham College, B. S., M. A., 1890; University of Chicago, M.S., 1895.
- F. H. Hoff**, Superintendent of Schools, Mitchell, South Dakota.
Ohio Northern University, A. B., 1891.

CHEMISTRY

- H. E. Griffith** (Chairman), Professor of Chemistry, Knox College, Galesburg, Illinois.
Northwestern University, B. S., 1892.
- D. C. Rybolt**, Principal of High School, Akron, Ohio.
Ohio Wesleyan University, A. B., 1893.
- D. Fall**, Professor of Chemistry, Albion College, Albion, Michigan,
University of Michigan, B. S., 1875, M. S., 1882; Albion College, Sc. D., 1890.
- W. L. Whitney**, Teacher of Chemistry in High School, Saginaw, E. S., Michigan.
University of Michigan, Ph. B., 1894.
- W. A. Redenbaugh**, Instructor in Chemistry, University of Illinois.
Dartmouth College, B. S., 1893, Ph. D., 1897.
- G. F. Weida**, Instructor in Chemistry, Central High School, St. Louis, Missouri.
University of Kansas, B.S., 1890; Johns Hopkins University, Ph.D., 1894.
- G. B. Frankforter**, Dean of the School of Chemistry, University of Minnesota.
University of Nebraska, B. S., 1886, M. A., 1888; University of Berlin, Ph. D., 1893.
- W. S. Hendrixson**, Professor of Chemistry, Iowa College, Grinnell, Iowa.
Harvard University, A. M., 1889, Ph. D., 1893.
- F. N. Peters**, Teacher in Chemistry, Central High School, Kansas City, Missouri.
University of Missouri, A. B., 1887, A. M., 1890; Illinois Wesleyan University, Ph. D., 1903.
- B. Dales**, Associate Professor of Chemistry, University of Nebraska.
University of Nebraska, B. S., 1897, M. A., 1899; Cornell University, Ph. D. 1901.

- H. A. Senter, Head of Department of Chemistry, High School, Omaha,
Nebraska.
University of Nebraska, B. Sc., 1893; Heidelberg, Ph. D., 1896.
- E. A. White, Teacher of Chemistry, High School, Kansas City, Kansas.
University of Kansas, A. B., 1904.
- Margaret V. Maguire, Teacher of Science, High School, Mitchell,
South Dakota.
University of Nebraska, B. Sc., 1904.
- Hans W. Schmidt, Teacher of Chemistry and Electrical Engineering,
Central High School, St Paul, Minnesota.
- G. L. Holter, Professor of Chemistry, Agricultural and Mechanical
College, Stillwater, Oklahoma.
Pennsylvania State College, B. S., 1886.

BOTANY

- C. MacMillan (Chairman), Professor of Botany, University of Minnesota.
University of Nebraska, A. B., 1885, A. M., 1886.
- F. C. Newcombe, Professor of Botany, University of Michigan.
Leipzig, Ph. D., 1893.
- L. Murbach, Head of the Department of Biology, Central High School,
Detroit, Michigan.
University of Michigan, Ph. B., 1889, B. S., 1890; Leipzig, Ph. D.,
1894.
- C. R. Barnes, Professor of Plant Physiology, University of Chicago.
Hanover College, A. M., Ph. D., 1886.
- O. W. Caldwell, Professor of Botany, Eastern Illinois State Normal
School, Charleston, Illinois.
Franklin College, B. S., 1894; University of Chicago, Ph. D., 1898.
- R. A. Harper, Professor of Botany, University of Wisconsin.
Bonn, Ph. D., 1896.
- A. H. Christman, Teacher of Science, Stout School of Domestic Economy, Menominee, Wisconsin.
University of Wisconsin, B. S., 1903.
- M. F. Arey, Head of Department of Natural Science, Iowa State
Normal School, Cedar Falls, Iowa.
Bowdoin, A. B., 1867, A. M., 1870.
- Mary I. Steele, Teacher of Biology, Central High School, Kansas City,
Missouri.
University of Missouri, B. S., 1900, M. A., 1901.
- C. E. Bessey, Professor of Botany and Dean, University of Nebraska.
Michigan Agricultural College, B. Sc., M. Sc.; Iowa State University, Ph. D.; Grinnell College, LL. D.
- E. A. Bostrom, Teacher of Botany, High School, Lincoln, Nebraska.
University of Nebraska, A. B., 1902.
- Alberta Cory, Teacher of Botany, High School, Kansas City, Kansas.
- C. S. Parmenter, Vice President of Baker University, Baldwin, Kansas.
Allegheny College, Ph. D.
- Eloise Butler, Teacher of Botany, South Side High School, Minneapolis, Minnesota.

**Margaret A. Thompson, Teacher of Botany, State Normal School,
Spearfish, South Dakota.**

State Normal School, Winona, Minnesota, 1886.

M. F. Guyer, Professor of Biology, University of Cincinnati.

**University of Chicago, B.S., 1894; University of Nebraska, A.M.,
1897; University of Chicago, Ph.D., 1900.**

ZOOLOGY

**J. Reighard (Chairman), Professor of Zoology, University of Michigan.
University of Michigan, Ph.B., 1882.**

**C. J. Herrick, Professor of Zoology, Denison University, Granville,
Ohio.**

**University of Cincinnati, B.S., 1891; Denison University, M.S.,
1895; Columbia University, Ph.D., 1900.**

**E. L. Moseley, Teacher of Science, High School, Sandusky, Ohio.
University of Michigan, A. M., 1885.**

**W. A. Locy, Professor of Zoology, Northwestern University.
University of Michigan, B.S., 1881, M.S., 1884; University of
Chicago, Ph. D., 1895.**

**F. L. Charles, Instructor in Biology, Northern State Normal School,
DeKalb, Illinois.**

Northwestern University, B.S., 1904, M.S., 1905.

**H. D. Denamore, Professor of Botany, Beloit College.
Beloit College, A.B., 1886. A.M.**

**L. Atherton, Head of Department of Biology, High School, Oshkosh,
Wisconsin.**

Albion College, B.S., 1895; University of Michigan, M.S., 1899.

**H. F. Nachtrieb, Professor of Animal Biology, University of Minne-
sota.**

University of Minnesota, B.S., 1882.

**W. W. Norris, Professor of Zoology, Iowa College, Grinnell, Iowa.
Iowa College, B.A., 1886.**

**J. A. Anderson, Head of Department of Biology, High School, Du-
buque, Iowa. Lake Forest College, A.B., 1897, A.M., 1898.**

**L. E. Griffin, Professor of Biology, Missouri Valley College, Marshall,
Missouri. Hamline College, B.A., 1895; Johns Hopkins Univer-
sity, Ph.D., 1900.**

**J. W. Scott, Teacher of Biology, Westport High School, Kansas City,
Missouri. University of Missouri, A.B., 1896, A.M., 1897; Univer-
sity of Chicago, Ph.D., 1904.**

**Caroline E. Stringer, Head of Department of Biology, High School,
Omaha, Nebraska. University of Nebraska, B.Sc., 1902, A.M., 1904.**

**J. M. Matheny, Superintendent of Schools, Flandreau, South Dakota.
University of Indiana, B.S., 1897, A.B., 1902.**

**A. Pihlblad, Professor of Biology Bethany College, Lindsborg, Kan-
sas. Bethany College, A.B., 1894, A.M., 1896; University of Chi-
cago, M.D., 1899.**

**C. E. Johnson, Teacher of Science, Sumner County High School, Wel-
lington, Kansas. Kansas State Normal, B.P., 1895; Kansas State
University, A.M., 1898.**

C. P. Lommen, Professor of Biology, University of South Dakota,
Vermillion. University of Minnesota, B.S., 1891.

COMMERCIAL SUBJECTS

- E. V. Robinson (Chairman), Principal, Central High School, St. Paul,
Minnesota.
University of Michigan, A.B., A.M.; Leipzig, Ph.D.
- F. C. Hicks, Professor of Economics and Civics, University of Cincinnati.
University of Michigan, A.B., 1886, Ph.D., 1890.
- D. Kinley, Dean of Graduate School, Director of Courses in Commerce, Professor of Economics, University of Illinois.
Yale University, A.B., 1884; University of Wisconsin, Ph.D., 1893.
- H. E. Brown, Principal, High School, Rock Island, Illinois.
Iowa College, Ph.B., 1899.
- F. L. McVey, Professor of Political Economy, University of Minnesota.
Ohio Wesleyan University, A.B., 1893; York University, Ph.D., 1895.
- M. M. Beddall, Principal, High School, Boone, Iowa.
University of Wisconsin, B.L., 1897.
- I. A. Loos, Professor of Political Economy, State University of Iowa.
Otterbein University, A.B., 1876, A.M., 1879; Penn College, D.C.L., 1898.
- M. S. Wildman, Assistant Professor of Economics, University of Missouri.
University of Chicago, Ph.D., 1904.
- P. B. S. Peters, Director of Business Course, Manual Training High School, Kansas City, Missouri.
Kansas City Law School, LL.B., 1900.
- G. A. Gregory, Superintendent of Schools, Crete, Nebraska.
Doane College, B.S., 1881.
- N. M. Graham, Principal, High School, South Omaha, Nebraska.
University of Nebraska, A.B.
- D. T. Walker, President, Watertown Commercial College, Watertown, South Dakota.

MANUAL TRAINING

- C. M. Woodward (Chairman), Dean of School of Engineering and Architecture, Washington University, St. Louis.
Harvard University, A.B., 1860; Washington University, Ph.D., 1874, LL.D., 1905.
- T. K. Lewis, Assistant Professor of Architectural Drawing, Ohio State University.
Ohio State University, B.S., 1894.
- J. W. Carr, Superintendent of Instruction, Dayton, Ohio.
Indiana University, A.B., 1885, A.M., 1890.
- G. N. Carman, Director, Lewis Institute, Chicago, Illinois.
University of Michigan, A.B., 1881.

could be proposed in Italy, France, Germany, and England, doubtless ninety-five per cent of the people would express themselves against it in all but the primary grades. Scotland alone among European nations would take a position similar to our own. In Scottish schools, elementary, secondary, and higher—one may see boys and girls working together in all classes; and so far as an observer can tell, no sex distinctions are made either in methods of teaching or in discipline, except that the universities seem not yet quite adjusted to the new régime. But elsewhere in Europe, the sexes are early differentiated in their work. Ask any English, German, French, or Italian school-master why boys and girls should not be trained together, and substantially the same reply will be made in every instance. The chief reason they give for separation is usually a moral one; they believe it is required by the very nature of things that at the dawn of adolescence at the latest boys and girls should be kept apart. Then masculine and feminine minds are differently constituted, and they need to be differently trained. Also, the boy is stronger than the girl, intellectually and otherwise, and he ought to be subjected to a more rigorous educational regimen. Moreover, men and women must fill quite different spheres in life, and each should have a suitable preparation therefor. Now, most teachers in America would deny each and all of these propositions. Among us the popular argument runs that there is no fundamental difference between the feminine and the masculine mind. In knowledge there are no sex distinctions, and there should be none artificially made in teaching. Besides, men and women must live together

in real life, and they should acquire an understanding of one another and a community of interests during the educational period. It is urged by the defendants of coeducation that, in the large and in all details, the moral relations of the sexes are improved by their being trained together.

2. *The Views of School Men*

At the outset we may glance at the views of some of those who are in actual control of educational forces, and whose opinions of coeducation are based upon first-hand knowledge. As a general principle, we would expect men in charge of segregated colleges to favor segregation ; and we find this to be true with scarcely an exception in the southern states where separation of the sexes prevails. On the other hand, those in charge of coeducational institutions would naturally be in favor of this régime, so that we ought not to attach final value to testimonies derived from these sources. President Hall¹, for instance, sees many reasons why women should be educated apart from men ; but President Jordan², President Thwing³, President Angell⁴, President Draper⁵, President White⁶, and many others⁷ see as many reasons why they should be educated together. President Jordan thinks the

¹ Adolescence, Vol. II, Chapter XVII.

² The Higher Education of Women ; Pop. Sci. Mo. Dec. 1902; also

³ Forum, Vol. 30.

⁴ Pop. Sci. Mo., Vol. 62, p. 5.

⁵ Educational Review, Vol. 25, p. 109.

⁶ Penn. Sch. Journ. Vol. XX, p. 313.

⁷ See the following : Brackett (Editor), Education of American Girls, New York, 1874. Harris, W.T. Report Nat. Bureau of Ed., 1891-92, pp. 806-812; Howe (Editor), Sex in education, Boston, 1874.

girl tends to acquire form rather than substance, technic rather than art in her education, and this is aggravated under segregation. He denies that the rush of women into state institutions has lowered scholarship; instead it has really improved academic conditions, for "young men are more in earnest, better in manners and morals, and in all ways more civilized than under monastic conditions. The women do more work in a more natural way, with better perspective and with saner incentives than when isolated from the influence of the society of men. There is less silliness and folly where a man is not a novelty. In coeducational institutions of high standards, frivolous conduct or scandals of any form are rarely known. The responsibility for decorum is thrown from the school to the woman, and the woman rises to the responsibility."

The question of coeducation is, perhaps, of special importance today in the secondary school; and it may be of interest to glance at the views of a number of principals in charge of high schools¹ in different sections of the country. These opinions were expressed in response to a series of questions

¹The following high schools sent replies to questions: Burlington, Vt.; Brunswick, Me.; Providence, R. I.; Stanford, Conn.; St. Louis, Mo.; Wilmington, Del.; Washington, D. C.; Rochester, N.Y.; Friendship, N. Y.; Medina, N. Y.; Buffalo, N. Y.; Columbus, Ohio; Detroit; Chicago; East Div., Milwaukee; Lincoln, Neb.; East Side, Denver; Yankton, S. D.; Livingston, Mont.; Eugene, Ore.; Rawlins, Wyo.; Oklahoma, Okla.; Birmingham, Ala.; Vicksburg, Miss.; Columbia, S. C.; Augusta, Ga.; Richmond, Va.; Hammond, La.; Houston, Tex.; Knoxville, Tenn.; Boise, Idaho; Topeka, Kan.; Manchester, Mass.; Stuyvesant (for boys) New York; Northwest, Philadelphia, Pa.; Little Rock, Ark.; Indianapolis; Salt Lake City; Lidgewood, N. D.; Asheville, N. C.; Colorado Springs; North Branch, Minn.; Milton, Wis.; New Orleans, La.; Stamford, Conn.; Tampa, Fla.

sent out by the writer, and touching the points at issue in the current discussions of the subject. The questions, with the answers from typical high schools, are indicated in the following summary.

Question 1. Is the plan of coeducation carried out in detail in your school?

Yes, 42; no, 3.

Question 2. Has the plan of segregation ever been tried? If so, with what results?

No, 36; yes, 4,—but unsatisfactory; yes, and satisfactory, 3. Segregation in first year of high school, 1; separate study halls, but recite together, 2.

Question 3. If you were free to work out your own ideals would you segregate the sexes?

No, 38; yes, 3. Yes, in some studies, as domestic science, manual training, physics, 3. Yes, above the twelfth year, 3.

Question 4. Are the boys benefitted by co-education? If so, how?

Yes, 39; failed to answer the question, 3; "No difference either way", 1; "Yes, after first year in the high school", 1; "Little benefit above twelfth year," 3.

Among the benefits to boys are named the following:

Intellectual	{ Stimulation to do better work. They are made "higher minded." Higher standard of scholarship maintained.
Moral	{ Stimulation to good conduct. Standard of honor elevated. "Tones them down" and raises their standard of morals. It is the natural way; there is no segregation in the home, in the church, or on the street, Less sex emphasis than in separate schools and hence less false modesty results.
Social.....	{ Boys are made more gentlemanly, refined more thoughtful, and considerate. Makes them chivalrous, courteous, and dignified. Promotes the real social organization of the school as a true part of life.
General	{ Gives more respect for and better appreciation of the opposite sex. Presence of girls is a restraining and elevating influence. Gives other ideals besides primitive one of beauty. Better personal appearance results. Leads to wiser and better choice of life helper.

Question 5. Among the benefits to the girls are named the following:

- | | | |
|-----------------|---|---|
| Intellectual | { | Gives them confidence in their own ability, their standard of scholarship in many subjects proving to be better than the boys.
Makes girls more robust mentally. |
| Moral | { | Makes wiser and later marriages,
Makes for a balanced social organization. |
| Emotional . . . | { | Girls less likely to be silly, simpering, affected and self-conscious.
Less embarrassment in presence of opposite sex.
Prevents the extreme sentimentality almost invariably found in Girls' Schools.
They pay less attention to boys per se, than the pupils in Girls' Schools. |
| Social | { | Social ideals higher,
Pay less attention to boys outside of school hours than girls where segregation is practiced. |

A considerable number of replies were in substance:—Both boys and girls in coeducational schools show much less of that magnified interest in the opposite sex which is so marked in the segregated schools.

Question 6. What evils resulting from coeducation have you observed?

- a. Too few men teachers.
- b. Work too exacting for girls at certain periods.
- c. Each sex tends to be a sort of distraction to the other, if thrown together after the 12th or 14th year.
- d. Boys sometimes hindered from proper self-assertiveness.
- e. Social life carried too far.
- f. Different interests of boys and girls require difference in courses.
- g. Undue self-consciousness and familiarity in some cases.

Twenty-eight said "no evils" resulted directly from coeducation. Three failed to answer this question. Sixteen qualified their answers.

Characteristic replies:—

"No evils not common to separate schools."

"Many evils from lack of proper system and supervision, not from coeducation."

"Evils result from the improper use of all human or divine institutions."

"Exception rather than the rule," etc.

Question 7. Do you favor different studies for boys and girls?

Nine answered "no"; three failed to answer the question; thirty-five favored either election of studies under proper system, or separate classes in manual training, domestic science, etc.; and several voted for separate classes in higher elementary mathematics and physics, but not in the general course of studies.

From a survey of the returns to our questions no one could conclude that in our country there is

dissatisfaction among school men with the general system of coeducation, although there are a few suggestions looking toward a modification of the plan as it is carried out in some places. But if the opinions of men in actual charge of education are to be depended upon, coeducation will stand the test on every vital point. It should be recognized, however, that most of those at the head of coeducational high schools have had no experience whatever with segregation; and as they have no intention of attempting separation of the sexes, they naturally would not be ready in detecting the shortcomings of coeducation; though it is reasonable to say that if there were any gravely serious defects in the system they would doubtless be reported.

In this connection it may be of service to quote the opinions of a few school superintendents, responding to a query addressed to them by the U. S. Commissioner of Education¹.

Superintendent Tarbell, of Providence, R. I., says:

"The high schools of Providence were changed about ten years ago from separate to coeducational schools. The elementary schools of this city have been coeducational for the last sixty-five years. There has been no change from coeducation to separate schools. We have established during the last ten years three new high schools, which are all coeducational. The subject of coeducation in high schools is not a matter which excites much discussion in this city. Personally, I favor coeducational institutions."

Superintendent Maxwell, of New York, says:

"The subject of co-education, especially in high or

¹ See Report of Com. of Ed. for 1900-1901, Chap. XXVII.

secondary schools, does not excite much discussion in this community. The present trend of opinion appears to be toward coeducation.

"In reply to your invitation for a statement of my personal observation relative to co-education, I would say that in more densely inhabited parts of New York City there is a good deal of opposition to coeducation, particularly where there is a large foreign element present in the schools. In the outlying and more thinly populated parts of the city there is a very strong feeling in favor of coeducation."

Superintendent Poland, Newark, N. J., writes:

"I am of the opinion that boys and girls are best educated together during the whole period of the elementary and secondary course."

Superintendent W. F. Slaton, Atlanta, Ga., says:

"It is my decided opinion that it is better that the sexes should be separate and taught entirely apart after they have reached the high school age. I am very sure, from both experience and observation, which extend over a period of fifty years, that we pursue the better plan."

From Superintendent Gove, Denver:

"In the light of my life's work I am compelled to express an opinion contrary to that held in my earlier life. I think coeducation of youth in their teens is not productive of the desired results. I should not object to the assembling of both sexes under the same roof and in the same classes, under proper restrictions. I think the training and culture of that sort of education, properly governed, is good training for adult life. I do object, however, to identical courses of instruction for the sexes. I also object to an identical amount of time for both sexes. The girls should do their school work in less time per day than the boys. This will re-

quire a longer term of years for accomplishing the average high-school course. The requirements and duties of the girl demand a training over and beyond that demanded for the boy. The boy fifteen years old can well afford to put in six hours a day in study and class work. His sister, fifteen years old, has duties of which he knows nothing, but which are important and which demand time for execution.

"Throwing aside altogether the consideration of modified physical functions, the other duties of our young people are widely separated by sex. Practically the typical high school can have its courses so adjusted that every girl in the house can be excused at noon, the boys doing the regular afternoon's work; the girl taking six years to complete the course which the boy accomplishes in four".

From Superintendent Van Sickie, Baltimore :

"My experience until last year was with coeducational high schools, both elementary and secondary. I am not able yet to see any advantage in separating the sexes".

Superintendent Balliet, Springfield, Mass., says:

"I have always been in favor of such coeducation; and whilst I have had supervision of schools in which the sexes were kept separate, from the primary schools up through the high schools, I have not seen any good reason for changing my views on the subject.

I have observed in schools where the sexes are educated together, as is the case in this city, that they have a mutually beneficial influence upon each other. I have not found any evils of a serious character at all to result from such association in school.

I have further observed in places in which the sexes were separated that such separation in school had the effect of leading to evils in other unavoidable associations on the street and on social occasions; evils which,

but for this artificial separation in school, I believe would not have existed. I believe that what objections there have arisen in certain localities to coeducation, are due to evils which are not due so much to the effect of coeducation, as they are due to the fact that there are weak teachers in the schools who have not the power to create either a stimulating, intellectual, or a wholesome moral atmosphere in the school. Wherever the separation of sexes appeared to be a necessity I have found weak teachers and poor schools in general. I believe that they are related as cause and effect."

3. *Lessons from the Old World.*

The plan of separating the sexes in education has been thoroughly tested in the Old World, and we may see if we can gain anything of service from their experience, which may enlighten us on the general question of coeducation *vs.* separation. Needless to say, it is extremely difficult to determine to what extent any educational policy is responsible for the peculiar traits of a nation or community, and the most we can do is to state certain reasonable inferences. It is worthy of note that Europeans, with here and there an exception as an American meets them, are firmly convinced that we are in grave peril in teaching boys and girls in the same school, and in the same way in respect to studies, methods, and discipline. They declare that our practice is both physically and morally dangerous. Now, one can not observe the results of the general European custom of separation beyond the primary grades without having certain convictions deeply impressed upon him. The writer recently asked eight American educators¹, who had made a study

¹President Thwing, President Jesse, Professors Whitney, Bolton, Ellis, Cubberley, Hanus, and Superintendent Marsh.

of European education, to express their opinions upon the results of separation of the sexes in all higher schools, and there is substantial agreement upon the following points. For one thing, the American student finds that women do not occupy as prominent a position anywhere in Europe as they do in America. They are not expected to play an important rôle in political, educational, or even social activities. They come second in the count always. Their freedom of action in every direction, except the purely domestic, seems narrowly circumscribed, compared with American women. Europeans cannot understand how it is possible for American girls to go about unprotected by fathers, brothers, or chaperons, as they do so freely in England, France, Germany, and Italy. European women are not encouraged to go abroad as American women are; it is thought their proper place is at home. There are many American girls studying in Rome, Paris, Berlin, and London, and they appear to take advantage of the opportunities offered in these cities more effectively than the natives themselves do. The American girl seems to be distinctly more independent and original in thought and action than her European sister; all observers recognize this. A number of European educators who have visited America have remarked to the writer upon the vivacity and intelligence of the women here. They are surprised to find that they can converse readily and pointedly upon matters of common interest. With us, there is no great gap between men and women in the most of their interests and activities; but just the reverse is true in the Old World.

This situation does not seem to be best for

of immense benefit to society. Is it not reasonable to suppose that her further emancipation through coeducation, which is certainly going on from one end to another of our country, will be of advantage, not only to woman herself, but to the entire social organism?

With respect to the vital differences in mental constitution between man and woman, it is to be noted that they are not after all so fundamental as many try to make out. Women have all the faculties involved in education that men have, only some of them are more and others are less completely specialized. Woman's attitude toward her environment is conservative, while man is more radical. Compared with him she can deal best with practical, concrete situations, requiring the use of memory and habit rather than analysis and constructive activity. In her emotional attitudes she is rather more active and centrifugal than her brother, and so she is less stable and consistent. In all animal life there are these typical feminine and masculine attitudes, and they have undoubtedly to be taken account of in training for life. But this does not of necessity require segregation. These different attitudes are provided for fairly well in our modern elective system, so that if there be a distinct advantage from some points of view in educating boys and girls in the same school, there need be no hesitancy in doing so because of these differences in their organization. As society is an organism with specialization of work and duties; so the school may preserve its organic character, and still provide for different powers and different needs.

It should be noted here that these special fem-

women stimulate the men to high endeavor in literary, artistic, educational, and other pusuits. In a very subtle but very real way woman determines largely the directions in which man will expend his energies, when they are not fully dissipated in the struggle for existence. In Europe today one may see civilizations beginning to decline, for one thing because masculine energy is being spent along lines of primitive, physical impulses. The status of woman encourages this, and her education leaves her helpless, and even indisposed, to do little else of a positive sort.

Now, the prominence of woman in American life is probably due in no small measure to her receiving an education much like that which the man receives. Coeducation as found in most of our schools makes the girl acquainted with things as they are, and on the whole develops her so that she can win the respect and admiration of men. As a result, feminine influence is felt in all the concerns of society in our country, and this is surely of advantage from whatever standpoint it is viewed.

But as the Europeans point out, there are in co-education disadvantages which we may not have escaped. In some of the boys' schools in Europe, particularly in Germany, more vigorous work is done than in the mixed schools in America, and probably because boys when alone can sometimes push on more rapidly than when the girls are with them; though this is denied by many school men in our country. And then there are boys who are doubtless too much concerned with the girls when the latter are too prominent in the environment; and the same principle may apply to the girls. However, under

the control of a thoroughly strong teacher, alike in personal and in teaching qualities, this evil can be managed successfully; but it becomes serious under a weak teacher.

There is another danger which Europeans think we have not sufficiently appreciated. The Moseley Commission declared that our boys were being made effeminate by our system of coeducation, and the predominance of women as teachers in our schools. Without doubt our boys would be very materially benefitted if they came under the influence of strong men much more generally than they now do, and this would be accomplished if they were segregated. But there is no reason, except a financial one, why men should not be placed in greater numbers in our coeducational schools. The girls as well as the boys need the influence of strong men; and one of the disadvantages of segregation is that they would not have instruction from men. The solution of the problem lies not in segregation so much as in raising the financial status of teaching so that capable men will be attracted to it, and so that they will equal the women in numbers in our schools.

While recognizing the great advantage of strong men in the education of a boy especially, it should at the same time be said that an American, observing the boys in the secondary schools and colleges of Europe, usually comes to the conclusion that our boys do not lack virility, and they may even possess it in greater degree than boys in certain of the countries of the Old World. There are doubtless boys among us who spend their recesses and out-of-school hours with the girls of their school, when they ought to be engaged in vigorous games.

The English boys in the great Public Schools at Eton, Rugby, etc., are probably better off in this respect than some of our boys; but this difficulty can be remedied if we can secure play grounds as they have at these Public Schools, so that all our boys may take part in games specially suited to them. Then we would compel them to participate in manly games, as they do in England. At the same time, we would have appropriate games for the girls, as they do in the better grade of girls' schools in England and Scotland.

There is one school in England where the superiority of coeducation is being demonstrated, as the Headmaster, Dr. Badeley, believes. Badeley's School, the Bedales, is beautifully located in the country about two hours by fast express from London. Here are one hundred and thirty-five boys and girls, working together all day in the class-rooms, laboratories, manual arts, shops, and gardens. They are all put through the same course until sixteen, when specialization begins, and the boys devote themselves more particularly to the scientific and mathematical subjects, and the girls to the historical, linguistic, and literary subjects. The Headmaster claims that, as it actually turns out, the boys after sixteen do more than the girls, and yet they are together in some parts of their work. The girls, and boys as well, look physically stronger than many of our high-school boys and girls; but it is evident that they do less book work than our pupils, and they are out-of-doors much more. Besides they live a regular and hygienic life in every way. It is significant that leading English educators, though violently opposed to

earlier, is more profound while it lasts, and is completed several years sooner in the case of the girl than the boy. The former attains relative stability and maturity at a period when the latter is still developing rapidly. Again, if one can rely upon the testimony of medical men, who are a unit in regard to the matter, the girl has less energy which may wisely be expended in labor either physical or mental, than the boy. According to these men the health of a considerable proportion of our girls is injured in the coeducational school as it exists among us. However, the testimony of the girls themselves will not bear out this statement. Professor Dewey¹, in his study of the health of two hundred and ninety women in higher education concluded that coeducational institutions are not so hard on girls as female colleges; one-third more students have nervous disorders in the latter than in the former type of school. Miss Preston² reporting on the health of two hundred college girls says that only 2.75 per cent were unable to continue their work from ill-health, while 2.85 per cent of men in Amherst College dropped out for the same cause. Miss Hayes³ has also shown that, judging from the testimony of girl students, they are about as well off, so far as health is concerned, in a coeducational college as before entrance thereto, or after graduation therefrom. In a number of personal interviews, extending over a period of eight years, with

¹ See his article on Health and Sex in Higher Education; Pop. Sci. Mo. 1886.

² The Influence of College Life on Health; Com. of Mass. Med. Soc. Boston, 1895.

³ Health of Women Students in England; Education, Jan. 1891.

men and women students in the University of Wisconsin, the writer has found that the women, by their own statements, have not suffered more than the men; and a large proportion of them have declared that they are in better health on the whole in the university than they are when they have no regular occupation. At the same time, they say they feel they would gain still more if the program of work were not quite so rigorous and inelastic. With very few exceptions they say emphatically that study and a regular life are favorable to health. In the higher classes of the University of Wisconsin the present year there are a number of women who have spent their earlier years in schools for women; and in interviews with the writer they have, with two exceptions, stated that they think the women here are stronger physically than they were in their former colleges. Where women are segregated, they say, some of them are likely to become hysterical, which is comparatively rare in co-educational schools. My informants state that the presence of the men conduces to nervous poise and health, and does not lead to overstrain, as some opponents of coeducation maintain. They go so far as to protest against housing of women in large dormitories; they think the women would be better in every way if they lived in small groups, into which men and other things of the world would be freely admitted.

One suspects that the testimony of women in coeducational institutions is not entirely reliable, though it is given in all honesty and sincerity. But any careful observer knows that women are eager to be admitted to all the advantages of coedu-

5. *The Views of Biologists and Psychologists*

In recent years biologists and psychologists such as Ellis¹, Hall², Patrick³, Brooks⁴, Thompson⁵, and others have been pointing out certain differences in the physical and mental organization of boys and girls; and the inference is drawn that if they are trained together one or the other, or both, will be injured in consequence.

Current theory respecting the more obvious differences between man and woman may be stated in the words of Hall.⁶ After indicating differences in the cerebral organization and development of man and woman he says,—

“Woman has rapid tact in extricating herself from difficulties; girls speak quicker than boys; old women are likely to be talkative, old men glum; men progress most after graduation; women are very prone to lose accomplishments and special culture and training, are more punctual in school and college, more regular in attendance, and in higher grades have the best marks, but vary less from the average; they excel in mental reproduction rather than in production; are superior in arts of conversation, more conservative and less radical; their vaso-motor system is more excitable; they are more emotional, blush and cry easier; are more often hypnotized; quicker to take suggestions; have more sympathy, pity, charity, generosity, and superstitions. Male crime to female is as 6 to 1, woman exceeding only

¹ *Man and Woman.*

² *Adolescence*, Vol. II, Chap. XVII.

³ *The Psychology of Woman*. Pop. Sci. Mo. June 1895.

⁴ *The Condition of Woman from a Biological Point of View*; two articles. Pop. Sci. Mo. June 1879.

⁵ *The Mental Traits of Sex*. Chicago Univ. Press. 1903.

⁶ *Adolescence*, Vol. II, p. 586.

in poisoning, domestic theft, and infanticide. She is about as superior to man in altruism as she is behind him in truth-telling, being more prone to ruse and deception. She is more credulous and less skeptical, more prone to fear and timidity, and has greater fidelity, dependence, reverence and devotion. She dresses for adornment rather than use. In savage and civilized life, her body is more often mutilated and she is more primitive. Her hair is long; she is more prone to wear ornaments which show wealth rather than to dress solely for protection or concealment; is still fond of feathers, skin, and fur, flowing garments, and partial exposure of person, so that she betrays rank and wealth more often than men. She still pinches her waist and feet; uses pins, powders, and perfumes, neck ornaments, beads, overshoes, and sometimes shoes that are not rights and lefts; is more subject to fashion; her work is far less specialized than that of man and less reduced to mechanism or machinery. Man is best adapted to the present; woman is more rooted in the past and the future, closer to the race and a more generic past. Thus again, in very many of the above traits, woman is far nearer childhood than man, and therefore in mind and body more prophetic of the future as well as reminiscent of the past".

Now, certain of these differences are without question conventional merely, and should disappear under a system of education where the ideals and standards are the same for women as for men. It is apparent that conventional differences between men and women should not be used against coeducation; but they may, instead, indicate the need of just this system. As was suggested above, students of social affairs in the Old and in the New World appear to believe that the emancipation of women from oppressive conventions in America has been

of immense benefit to society. Is it not reasonable to suppose that her further emancipation through coeducation, which is certainly going on from one end to another of our country, will be of advantage, not only to woman herself, but to the entire social organism?

With respect to the vital differences in mental constitution between man and woman, it is to be noted that they are not after all so fundamental as many try to make out. Women have all the faculties involved in education that men have, only some of them are more and others are less completely specialized. Woman's attitude toward her environment is conservative, while man is more radical. Compared with him she can deal best with practical, concrete situations, requiring the use of memory and habit rather than analysis and constructive activity. In her emotional attitudes she is rather more active and centrifugal than her brother, and so she is less stable and consistent. In all animal life there are these typical feminine and masculine attitudes, and they have undoubtedly to be taken account of in training for life. But this does not of necessity require segregation. These different attitudes are provided for fairly well in our modern elective system, so that if there be a distinct advantage from some points of view in educating boys and girls in the same school, there need be no hesitancy in doing so because of these differences in their organization. As society is an organism with specialization of work and duties; so the school may preserve its organic character, and still provide for different powers and different needs.

It should be noted here that these special fem-

inine and masculine traits are of the nature of differentiations from general fundamental likenesses. So boys and girls have many abilities and needs in common, and much of their education should be the same, if there is any advantage in their growing up together. Thus they could and should pursue their arithmetic and their elementary history and science and language in the same way. No responsible person among us, so far as I am aware, claims that a girl should be taught physics, as far as she goes in it, by different methods from those employed with the boy. Because she excels in verbal memory is no justification for having her learn science out of a book, while her brother deals in a vital way with concrete facts. The latter may go farther in his study than the former; but this is a question of specialization in work, and not a difference in methods of presentation. The point is that if the school be an organism, presenting in microcosm all the activities of the larger social organism, then the girl may take the work best suited to her nature and needs, and the boy may do the same; and in much that they do they will work side by side, but in certain particulars they will work apart. This actually is the case in our higher coeducational schools today. In the universities, the men are going largely into engineering, commerce, law, agriculture, and applied science, and the women are turning to education and the arts; but in a considerable part of their work—their language, history, English, elementary mathematics, and the like,—they pursue the courses together. It is entirely erroneous to say that because girls are in a coeducational institution they must do the same work as

men. Nor is it true that in matters of discipline they must be treated just like the men. The girls have their rules of conduct suited to their needs and traditions, and the men go their way unhindered by the presence of the women. Men are not less athletic in a coeducational than in an exclusive institution. There are no educative activities found in either men's or women's colleges that are not found in coeducational institutions. I think it would be a reckless person who would say that the men in our coeducational colleges in America are less vigorous and manly than those in Eton or Oxford or Cambridge or the Sorbonne or Heidelberg or Leipzig or Berlin or the Universities of Bologna or Rome or Naples ; and the same proposition in effect could be extended to the women in our colleges.

In the matter of temperament, there is, of course, a fundamental difference between the boy and the girl. The former is normally aggressive and independent ; the latter is retiring and dependent. The former resists authority, and has a dull conscience in the matter of duties, while the latter is normally docile, and faithful in the performance of tasks. The former needs urging more than the latter ; and often a method of discipline which would be wholesome for the boy would be harsh for the girl, even if she were only a witness to its application with the boy. In early adolescence boys need a firm hand in control, and often they could be dealt with more effectively if the girls were not about. Even if they are in the same school, and are together in part of their work, there would often be an advantage if they could be by them-

selves for a portion of the time, so that each could be dealt with according to special needs. It will not solve the problem to separate them completely, nor will it be best either to make no distinctions whatever between them. The one extreme fails to provide for special needs, while the other fails to take account of the good influences which one sex may exert upon the other. The situation is an exceedingly complex one, and it can not be dealt with wisely by pursuing one straight course or another merely to simplify administrative control. The latter consideration has been altogether too prominent in our educational work in the past, and especially in reference to this matter of the education of boys and girls.

6. Limited Segregation.

Our discussion has led us to the view that the principle of coeducation must be retained, but this does not mean that the education of boys and girls must be identical. All the evidence bearing on the problem indicates that the girl must not be required to keep step with the boy from the beginning to the end of her educational career. At times she can move faster, and at other times she must move more slowly. Particularly during early adolescence she should have more leisure than the boy requires; our present plan of crowding her through the course without regard to her peculiar needs is, to say the least, crude and unscientific. If we can not so modify our present coeducational schools as to permit the girl to take more time to complete the secondary school course, then it would be better, probably, to separate boys and girls during this period,

E. V. Brumbaugh of the Marshalltown, Iowa, High School, as follows:

COEDUCATION. THE CLEVELAND PLAN.

E. V. BRUMBAUGH, PRINCIPAL OF THE HIGH SCHOOL,
MARSHALLTOWN, IOWA.

In preface to the initial discussion of the Cleveland plan, I might state that the standpoint from which it will be viewed is, first of all, that of the small country school. And, secondly, from the standpoint of one who is convinced that there is need for some change in the present plan of school administration, and who is convinced further that this change can best be secured by some plan of limited segregation.

That the question of the coeducation of boys and girls is by no means a settled question is very clearly shown by the renewed agitation and increasing importance given to its discussion in the educational and daily press, as well as by its position on the program of this Association.

The instruction of boys and girls above the elementary schools in the same classes may be described as a characteristic American custom. It is true that the system holds to a limited extent in English and Continental schools, but is nowhere there, the universal and ordinary method of school administration or management. The discussion of coeducation may therefore be confined to a study of the American plans and systems.

In the first place it needs to be made plain that the education of boys and girls in the same classes has been a development and growth, rather than a consciously devised plan of school methods.

Originating as it did in the lack of school funds for the establishment of separate schools, and taking its strength through the western states, it has gradually spread as a custom, through the country, until today in the Central states, it would be difficult to find a public high school where coeducation is not the system in operation.

Through this development it has come to have all the prestige and weight that accompany any strong and established system of administration, and to change which may be a matter of great difficulty and which will need cautious methods of attack. There have already through the daily press been heaped upon some of the advocates of a different method of administration, the abuse and scorn of those who are wedded to the present system, probably through no reason other than that it is the system that is in use and to which they have been accustomed.

To deny that there are any advantages of the present method of mixed classes, would of course be absurd. There are many points in which the instruction of boys and girls together is to the great benefit of both, but on the whole it appears to a large and growing number of persons that the advantages of this system do not over weigh the points in which it is defective; and this body of students are demanding today that there shall be a change or adaptation of the present method of miscellaneous instruction in mixed classes, and a more scientific gradation of work and school methods.

The usual arguments and reasons offered for the present system of secondary instruction are, first, that it is a system economical of the money of

the taxpayers. In smaller places this argument is a valid and convincing one. In those localities and communities where the number of pupils is small, and the teaching staff limited this will be the final and convincing reason for the retention of the present system, but in all other cases further reasons for the present system will need to be advanced. The refining influence of girls upon boys is also one of the statements usually met with in discussions of this question, and the truth of the statement can scarcely be denied by one who is familiar with classes taught under some segregation plan and those under the mixed instruction method. There is no question that the presence of girls in the classes with boys, does result in a smoother order and discipline, a repression of the boisterousness (boyishness) of the male members of the class, in a suppression of his restlessness and desire to take into his own control the progress of the lesson, in a lowering of the voice and carefulness as to what is said. But the question of whether this so-called refinement and increased ease of discipline of the mixed classes which is thus seen to be secured through the repression of the individuality of the male portion of the class and a reduction to the feminine plane, is an education or rather an atrophy of the powers of a portion at least of the class is not so easy to answer in the affirmative.

Lastly a great point is made in the demand that there shall be equal opportunity for the boy and for his sister, and this is usually the citadel of defense of those who are in favor of the education of pupils in mixed classes. To those who make this point there is no reply if it is proposed to give

either the one or the other sex an education differing in purpose or in thoroughness. However if the purpose of the education of young people is to make better citizens of them, to prepare them better to live their lives and to transmit to their offspring increased power, knowledge, morality and strength of character and mind, then the question of whether this result can be accomplished better through the education of the different sexes in classes by themselves is merely a question of methods, understanding, and knowledge of psychology.

Until children reach the age of adolescence, there is little differentiation of abilities, pursuits, or nature, but with the onset of this period there comes into their natures something which causes them to draw away from one another and to isolate themselves from those of the opposite sex. This change takes place at about or near the age of entrance into the secondary schools and under the present system of classification these youth who naturally are seeking to avoid one another, are thrown into close contact in the study room, library, and class room. Their interests are different, their ideals as far apart as the antipodes. The maturity of the girls is usually from a year and a half to two years greater than that of boys of the same age. We are accustomed at present to grade our pupils into divisions by years. Some endeavor to further grade these of the same classes into sections of like mental ability. To carry the gradation but a step further we may then grade them into classes by sex. Surely no one will claim that there is less difference in ability between adoles-

cent boys and girls of the same age than between boys or girls of the same classes.

This separation of the classes allows of a better adaptation of the school work to the needs of particular pupils. It is a fact well known to all, that there are certain teachers who are particularly adapted to certain classes of pupils. This teacher may be very successful with boys, that one with girls, another may be efficient to bring up the slow or defective pupils. Under the present system of classification the teacher whose success lies with boys may have to devote half her time to the instruction of girls, to whose needs she may be indifferent or ignorant. Why should we waste half of this teacher's ability, when it is altogether possible to utilize the whole of it? There is no question that the girls of every school need as greatly as do the boys, the care and instruction of some teacher who understands their peculiarities and weaknesses as well as their strength and possibilities, and this too can better be accomplished through a division of the classes into sections of boys and girls.

It is not intended or proposed that there shall be a differentiation of studies. The elective system in general use in a large number of schools already provides the solution of this difficulty. It may be that it is wise for the girl and the boy to take the identically same studies. It is not necessary that their instruction should be the same, nor is it often wise that it should. It is seldom that we hear of a boy injuring his health through over study. It is not uncommon that his sister lays the foundation of permanent ill-health and disease through excessive and ill-advised application. It is not often

possible for a teacher to over-urge a boy to application to his lessons. It is the usual thing rather than the reverse for the girl of the class to take to herself reprimand and complaint because of poorly prepared lessons, where in the mixed classes the fault lies rather with her brother than herself.

Finally because of the fact that there are girls in the schools in the proportion of about three girls to two boys, and because of the further fact that owing to their greater application and faithfulness as well as to their greater maturity of mind and powers they rank in their classes higher than do the boys, they have thus decided and marked the average standing and kind of work of their classes, thus leading to a feminization of the schools. This fact is easily and markedly apparent to any person who visits classes in a secondary school where both mixed and segregated classes are held at the same time. That the girls should be allowed to make the greatest advancement that is possible will readily be granted, but is it right or just that they shall be allowed to determine not only the amount but also the kind of instruction for the boys as well as for their own sex?

To those who have had experience with both systems, there is no question that under the system of segregation, the members of both classes give a greater interest to their school work, a larger expression to their individuality, are less fearful of taking a stand and expressing their thoughts, and are more ready to defend a point upon which they have formed an opinion. It is true that in the matter of control of the class there is usually at the first an increased difficulty with the boys. It is the

testimony of those who have had these classes, however, that this difficulty has disappeared after the teacher has become acquainted with the needs and methods of handling such classes, which then give no greater trouble than any other sections.

Because of these reasons therefore as well as through a belief that the present system of mixed education is not the wisest for our secondary schools there has grown up in these central states a feeling that the present methods of coeducation in such general acceptance should be in some manner changed and reformed.

This belief has resulted in several different forms of change. Few if any cities in the territory of this association have erected separate schools for boys and girls. The belief in the need of a changed system has not yet carried the minds of the people of this territory to the point where they are ready to erect and maintain separate schools and faculties for boys and girls. Neither has it in the public secondary schools generally led to the establishment of annexes or separate faculties for the two sexes.

The movement for segregation rather has taken the form of the division of established classes by sexes either throughout the entire course or through a portion of the course. It has also taken the form of a separation of the boys from the girls while in the study-rooms—but with recitation in the same classes. This is the form referred to as the "Cleveland Plan."

As a step towards the solution of the problem, the working of the plan will be regarded with great interest, and a statement of the actual results from a school where the plan is in actual operation which

is to follow this introduction will be of the greatest interest and value. Any experiment for the bettering of the present system can not but have value even though its results be only negative in that it will show what dangers are to be avoided.

It would seem in view of the reasons which have already been offered, that to obtain the greatest good from a system of segregation, that system should present

1. Recognition of the fundamental differences between adolescent boys and girls.
2. More complete gradation than is ordinarily practiced at present.
3. Better adaptation to the needs of pupils through
 - a. Adaptation of teachers to classes
 - b. Differentiation of instruction for boys and girls
 - c. Recognition of physical dissimilarity
 - d. Avoidance of feminization of schools.

The Cleveland system seems to be weak in that it does not meet and provide for all of these difficulties. It does, it is true, recognize that there are differences between boys and girls, for it requires that they should be seated in different rooms for their study. Perhaps to a limited extent it does recognize that there is a physical dissimilarity, but in these elements only does it meet the requirements laid down for a complete system of segregation. It altogether ignores the requirement of a better or more accurate gradation into classes, through its plan of mixing the boys and girls for the recitation. Neither does it take into consideration the adaptability of the different teachers for instructing classes of the one or the other sex, and in its ignoring of this requirement is one of its greatest defects. In its failure to provide for the differentiation of the

instruction of the boys and the girls, it also offers almost as great a weakness as in the preceding point, while in the last point mentioned, viz., the feminization of the methods of instruction and courses of study it offers no help whatever.

Wherever the Cleveland plan is possible, it is also possible to provide a plan which will meet all of the objections which have just been offered to it. The plan of complete segregation throughout the course offers great advantages. This may not be possible in every case. Where this can not be done, if any segregation at all can be accomplished and be of any value, the plan of limited segregation in classes for a period of two or three years is feasible, and through its greater adaptation to the needs of the situation offers a more complete and better solution of the problem.

Following the reading of this paper, Principal B. U. Rannalls of the East High School, Cleveland Ohio, not being present, Principal Harris spoke as follows on the Cleveland plan.

If you will pardon me, I will state just a word from the chair as to the plan at Cleveland. The session rooms seat about fifty. The girls are seated in rooms by themselves, the boys by themselves, as stated here, but not separated in classes. This last year in one of the schools,—a large school where there were about eight hundred of the boys and eight hundred of the girls,—the plan was tried, or rather forced upon the administration, of having different classes for boys and girls in order to accommodate the manual training. Consequently there was an excellent opportunity to watch the

result in the class room—the question of this segregation. I had anticipated the boys would not do so well. On the contrary, I can see very little difference in the boys' rooms. The fifty boys are put into two divisions and classes recite by themselves—exactly the same line of work. The fifty girls are put into two classes and recite by themselves. As I said, I can see very little difference in the result upon the boys. I myself do not fear that trouble at all, of the control of boys. There was a difference in the girls. Much to my surprise, the girls are not doing so well. The girls' classes do not rank so well as the boys. We have the elective course [there very largely, but many of the boys elect the line of work that the girls take, and there is a lack of the interest and enthusiasm in this class that we have had in other classes before. I shall certainly the coming year return to the old plan of reciting together. I firmly believe that when we have the coeducation at all, where they can be segregated in the session rooms, if we also segregate them in the class room without separating entirely the different line of work, we lose the benefit of the coeducation and we get the evils of the coeducation.

President Charles F. Thwing of the Western Reserve University, Cleveland, Ohio, then read the following paper:

THE CO-ORDINATE PLAN IN THE EDUCATION OF WOMEN

CHARLES F. THWING PRESIDENT, WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO.

The Cleveland plan, so far as it touches Western

Reserve University, requires not argument, but interpretation.

The *historical interpretation* is simple. In the year 1888 the Trustees of Adelbert College of Western Reserve University determined no longer to receive women as students and also voted to promote the foundation of a college for women alone. Among the reasons of this action was the fact that most colleges of Ohio were, as they still are, coeducational. The need of another well established college of this type was, therefore small. The need of a college for women alone seemed to some urgent. In the growing sense of the confederation of educational forces, it appeared wise to establish such a college as a part of Western Reserve University.

The *administrative and executive interpretation* of the Cleveland plan is also simple. The College for Women of Western Reserve University has a Faculty of some thirty members, a body of students numbering about three hundred. It has given about five hundred degrees. Its equipment and endowment represent about eight hundred thousand dollars divided nearly equally between equipment and endowment. In Western Reserve University is also a college for men known as Adelbert College. It also has a Faculty of about thirty members, and also a body of students numbering nearly three hundred. It has, in the eighty years of its existence, come to represent certain ideals of scholarship, and these ideals are embodied in the customary forms of scholastic equipment. These two colleges exist in the same University, side by side, each with a Faculty, a body of students, buildings and equipment, each independent of the other.

Yet there is a degree of affiliation. The Trustees of these two colleges are largely the same gentlemen. The buildings of the two colleges are placed on adjoining lands; the scientific laboratories are used in common, the course of study is practically the same, which course is elective after the Freshman year. In the social relationship of the students, the ordinary principles and methods prevail.

I wish also to say a word regarding what may be called the *argumentative interpretation* of this general condition.

To argue that a co-educational college is the better or the best, or to argue that a separate college is the better or the best, or to argue that the co-ordinate college is the better or the best, is not wise. Such argumentation represents a form of general statement which does not apply to the practical condition of the training of boys and girls. Such argumentation is like saying blue ribbons are better than pink, or pink superior to white. Each is better in certain conditions.

It is a most happy circumstance that this principle of choice is not difficult of application. For colleges of the three chief types,—the separate, the co-educational, and the co-ordinate,—are available. In New England one finds colleges for boys alone, for girls alone, for both boys and girls, and also for boys and girls under the co-ordinate system, although the separate system is the more common one. In the Middle West the same condition obtains, although the co-educational type is the more common. In the Western West, co-education is the rule, but to it are found a few, and only a few, exceptions. In general it is just to say that there

is no difficulty in applying the principle of election in the choice of the co-educational, co-ordinate or separate type.

It is also to be said that this principle of election is constantly applied on other grounds than those embodied in sex. Reputation, rural or urban or suburban location, climate, not to speak of athletic interests, determine the choice of a college. One of the most useful and distinguished professors of Harvard College said to me that it fell to him to make the selection of a college for his nephews; one he kept at Harvard, and one he sent to Amherst. Pick out the college for the student, pick out the student for the college, in matters touching sex, as well as in matters touching scholarship and undergraduate atmosphere.

The Englewood plan was next presented by Principal J. E. Armstrong of the Englewood High School, Chicago, as follows :

THE ENGLEWOOD PLAN

PRINCIPAL J. E. ARMSTRONG, ENGLEWOOD HIGH SCHOOL,
CHICAGO, ILLINOIS.

The plan of sex segregation in vogue at the Englewood High School, is based upon the fact that boys and girls grow at a different rate and their periods of growth and rest come at different intervals. Girls begin their transformations to womanhood about two years sooner than boys begin the corresponding changes to manhood.

The common law has long since recognized the fact that completed womanhood comes at eighteen and manhood at twenty-one. It is said that men and women usually find their true level in the world when they marry, and the very large majority of

such men find their life companions in a woman from two to three years younger than themselves. In the face of all this we have assumed that boys and girls from thirteen to seventeen were in all respects equal in mental ability, so we have taught them in mixed classes. But the girl of thirteen is taller and heavier than the boy of the same age. At about fifteen the boy begins a very rapid growth and soon overtakes and then exceeds the girl in height and weight. So rapid is his growth at this period that it is not uncommon to add six inches to his height and fifty pounds to his weight in a single year.

During the time of this rapid change for both sexes, the mental is as much transformed as the physical being. A new world opens to the adolescent youth. Consciousness of self—especially the inner self—becomes prominent. Now if these periods of awakening occurred at the same age in the two sexes, our problem in education would be much simpler. But when the boy and girl enter high school together, at about the age of fourteen, the girl has the decided advantage. She is two years more mature in body and mind. She is already a woman in seriousness of purpose, in power of application and in womanly instincts. The boy is but a playful little fellow, not yet weaned from marbles and peg-tops. He loves freedom from all restraints. He has a strong antipathy to the conventional ways of society. He is the despair of his fond mother and the dread of his former girl companions. He loves to tease or bully his younger or weaker companions. Soon he commences to grow and as he does so, nature makes such enormous drafts upon his stomach that he can do little but eat, exercise,

women to become more womanly, and to train each ~~—~~
to specialize so there shall be one distinct type for
the noblest manhood and another for the most su-
perior womanhood. ~~—~~

Principal W. J. S. Bryan of the Central High School, St. Louis, Missouri, presented the Boston plan in the following paper:

THE BOSTON PLAN.

BY PRINCIPAL W. J. S. BRYAN, CENTRAL HIGH SCHOOL,
ST. LOUIS, MISSOURI.

I am sure I do not know why I was selected to present the Boston plan. I have thought about it considerably and have concluded that it was because I was far enough away from Boston to look upon it with an impartial eye. I endeavored to ascertain from the Superintendent of the Boston Public Schools what was the Boston plan, and it seemed to him to be a revelation that there was such a thing; he denied knowing its existence. I was therefore obliged to look for the historical basis.

Up to the year 1790 there was no provision for the education of girls in Boston. The Latin grammar schools and the public writing schools were designed for boys exclusively. An English grammar department was then added to each of the three public writing schools, and for the first time provision was made for girls to attend these schools for six months and no more each year. This arrangement was continued until 1828 without change, except an increase to eight months in the duration of the attendance of girls. In 1828 the privilege of attending the whole year was granted to girls. In 1830 a committee appointed to inquire whether es-

The girl of the same age is more tractable ; she will take the advice of her teachers and parents as to what she should do and the way to do it. She is neat and painstaking. She delights in disciplinary studies, and especially in language and literature. Nature has bestowed on her some rare gifts. She has instincts and intuitions that seldom manifest themselves in the boy, and if her logical powers are faulty, she is capable of arriving at a correct conclusion and more quickly than he. Her sympathies are keener and her tastes more refined. Tried by man's standard for generations, woman was regarded by him as an inferior being. Man even now is apt to regard the intuitions of women of little value unless they can be reduced to a logical form ; but alas for impetuous man, if not often held in check by the instincts and intuitions of a true wife or mother ! Drummond suggests that "woman once"—in prehistoric time—"domesticated man". That is, woman, with the accumulated wisdom of ancestry, which we call instinct, and the subjective insight into the forgotten past, which we call intuition, was able to make better use of the experiences of the race than impulsive, headstrong, independent man, depending upon reason for his guidance ? Her gentler nature tamed and subdued his wild nature, and so man became a domestic animal. There still remains much for her to do. Nature intends her to be the conservator of all that is good and helpful in the advancement of the race. She holds the keys to the treasure-house of the past. She keeps in check the impetuous, venturesome spirit of man.

Nature has made no mistake in so constituting

our children that the boy begins that marvelous change that transforms his physical and mental being into maturity several years later than his sister, nor is there any mistake that she completes her growth several years sooner. Nature intends him to be the bread-winner, the discoverer, the inventor, the mechanic, the jurist, the defender of the home and nation. Every trait of the boy nature prompts in these directions. It is only when we try to thwart nature by making our boys and girls alike that mistakes occur. If it is a fair assumption that man is to be pre-eminently the provider, the discoverer, the inventor, and woman the home-keeper, the care-taker, the child-trainer, the virtue-lover, the guardian of useful experiences of the race, how are we best to train each for his or her life-work? If the sexes are endowed exactly alike and are to perform such very different functions, surely they each need a different training; and if they are differently endowed, as I believe most people admit, then still they need different treatment, whether they are to perform different or identical functions. Should a creature endowed by nature with marvelous intuitions have these powers crippled by a course in higher mathematics or other forms of logic? Is imagination strengthened by a long course in mechanics? Is the inventive faculty to be quickened by rules of grammar? Is the genius for discovery and invention strengthened by herding boys in the graveyards of the past? Yet these are our traditional methods. We teach our boys and girls the same studies in the same way.

Turning to the physical side again, it is a fact long deplored by physicians that we neglect to in-

struct these young people upon matters of the greatest importance, not only for their own health and comfort, but for the good of the race itself. Few teachers would dare to venture into this field in a mixed class, and if they should, their language must be so guarded that there is great probability of being misunderstood or of giving wrong impressions to an imagination already on fire with curiosity. Sensitive minds make undue personal applications, and coarse minds turn every reference to sex relations into obscene pictures. There is but one solution of this difficult but important problem and that is, through segregation, with plain talks in straightforward, Anglo-Saxon language.

It has long been a subject of study with me as to what can be done to prepare boys and girls to work even in parallel lines with equal advantages for each. I have accordingly divided all first year classes into boys' classes and girls' classes. Boys and girls assemble in the same division rooms or sit in the same study halls but when it comes to the recitations, they separate. The work in the class room is made to vary to meet the needs of each sex. This work has been going on now for over a year and the results are very gratifying. Some opponents of this scheme have opposed what they consider a serious objection to it, viz., that "since boys and girls are reared in the same family and since they are to associate throughout life, they ought to be taught in the same classes." In this they lose sight of the fact that in the home boys and girls in their early teens live lives quite apart from each other. The parents recognize this in supplying different books, games, companions, and differ-

(6) That they form separate or combined musical and literary organizations with the counsel and advice and under the control of the principal and teachers co-operating with him.

(7) That they form separate athletic organizations with the approval and subject to regulations of the principal or faculty representative appointed by him.

(8) That they enjoy certain known and approved social occasions during the last year or two of their course.

Some of these features are local or transient and not at all essential to coeducation, which existed for a long time without them and is independent of them and not responsible for them, but they characterize coeducation in most of the large city high schools.

In the public schools separation of boys from girls or of boys or girls from other boys or girls whose course of study is different is unwise. This is the mistake made in the establishment of Manual Training High Schools or Commercial High Schools or Latin Schools or English High Schools. Such separation presupposes essential differences which do not exist between pupils of these schools, gives rise to false distinctions, emphasizes unduly certain studies, and overlooks the preponderant basal elements of similarity, predisposes young people to certain lines of activity for which they perhaps have no special aptitude, and greatly increases the cost of equipment. Far wiser and better is the plan which provides for all recognized branches of secondary study in fully equipped high schools in which students of all courses meet and mingle and com-

ary courtship or the instinct of the boy to show off and the girl to approve by giving attention to boys' nonsense, is cut off from the recitation. I believe the social influences of coeducation are its chief benefit and by our plan this is preserved by not removing the sexes to different buildings.

This plan also differs radically from the Cleveland plan which separates pupils in the study hall but not in the recitation. In this the difference in maturity, aims, and methods, gives place to the one feature of reducing social intercourse which I consider natural and under proper restraints desirable.

Now as to the time when this separation should begin and how long it should continue, I would say that it should begin with the beginning of adolescence and be carried possibly to the end of the second year of high school;—that is from about the beginning of the 7th grade to the end of the 10th,—four years. This would provide special instruction for each sex during the period of rapid growth and uneven development.

I think it quite a significant fact that the parents of the pupils of the Englewood High School have heartily endorsed this movement. There seems to be a common feeling that there is a boy problem and a girl problem that the parents are seeking to solve. Coeducation in the early teens is not solving this problem to the entire satisfaction of the fathers and mothers. By a vote of two to one they asked the Board to try it, and by a vote of nine to one, after a half years' trial, they have asked to have it continued. It is also a matter of some significance that the chief opponents have been women

who feared that in some way this scheme is going to militate against the advancement of women. We have guarded as much as possible against this by assigning both a boys' class and a girls' class to the same teacher. In this way each teacher has an opportunity of studying the needs of each sex and no partiality is shown to either. Let us remember that complete segregation existed before coeducation and that the latter came about chiefly as the most economical method of conducting a school. This same reason will probably forbid a return to complete segregation even if that were desirable. But in every large high school it will always be possible to separate the sexes during the first one or two years just as economically as to teach them in mixed classes.

It seems to me that we are failing to reach the needs of our young people at the beginning of adolescence in mixed classes by not being able to push the vigorous distinctions of the complementary relations of the sexes. The ideal for woman should be not to become a business man, nor yet even to look at life in man's way. Neither is it desirable that man should lose the virile traits that characterize this sex. From the dawning of life on the earth, sex has become more and more differentiated. The earliest forms of both plants and animals were *without* sex. The higher up the scale of life we go the more complete the differentiation. Among savages we find men and women most alike in mental and physical characteristics. Are we not interfering with this higher evolution of sex when we attempt to train our boys and girls in the same way.

It seems to me that segregation, as I am trying it, is but a further step in the grading system by which I have gathered those of like training together. I believe the evolution of text-book making has brought about the use of studies ill adapted to boys' needs. Many a boy loses interest in school studies because study has lost so much of its charm for him by being adapted to the girl mind and because of the discouragement of competing with the mature girls. Possibly many a boy is driven from school, not because money is a necessity, but because of the lack of mental stimulus. Girls have suffered less, I believe, because they more readily take advice, and, because, being in the majority of numbers and mature of mind, the studies have been changed to suit their needs.

I believe the *first benefit* to be derived from segregation *will be to hold more boys in school* and second, to drive us to better teaching, since a teacher must study her pupils more than before. If we could lay aside any fears we may entertain that segregation is going to deprive woman of the fruits of the splendid victory she has won in securing the right to an equal education with man, we may learn how to push her success one step higher. If I thought that segregation would in any way lessen the chances for my daughters to obtain an equal chance with my sons, I would be the last person to wish to put it into the schools; but I am more and more impressed with the fact that *equal rights* are not *identical rights* and that to help our boys and girls fully to attain their highest usefulness, is *to train them at the outset of manhood and womanhood to obey the instincts that lead men to become more manly and*

women to become more womanly, and to train each to specialize so there shall be one distinct type for the noblest manhood and another for the most superior womanhood.

Principal W. J. S. Bryan of the Central High School, St. Louis, Missouri, presented the Boston plan in the following paper:

THE BOSTON PLAN.

BY PRINCIPAL W. J. S. BRYAN, CENTRAL HIGH SCHOOL,
ST. LOUIS, MISSOURI.

I am sure I do not know why I was selected to present the Boston plan. I have thought about it considerably and have concluded that it was because I was far enough away from Boston to look upon it with an impartial eye. I endeavored to ascertain from the Superintendent of the Boston Public Schools what was the Boston plan, and it seemed to him to be a revelation that there was such a thing; he denied knowing its existence. I was therefore obliged to look for the historical basis.

Up to the year 1790 there was no provision for the education of girls in Boston. The Latin grammar schools and the public writing schools were designed for boys exclusively. An English grammar department was then added to each of the three public writing schools, and for the first time provision was made for girls to attend these schools for six months and no more each year. This arrangement was continued until 1828 without change, except an increase to eight months in the duration of the attendance of girls. In 1828 the privilege of attending the whole year was granted to girls. In 1830 a committee appointed to inquire whether es-

sential improvements might not be introduced by a modification of the then existing system or by the adoption of some other, brought in a report favoring the entire separation of boys and girls and designating certain schools in different parts of the city for boys or girls exclusively. By a resolution adopted February, 1893, two grammar schools were designated for boys and two for girls exclusively, while the other five grammar schools were left for the use of boys and girls alike. To quote from the majority report of a committee appointed March 28, 1890, "to consider and report upon the subject of coeducation of the sexes, with special reference to future buildings". "Thus was rooted in the school system of Boston an error which may take years to fully eradicate. Thus this city of Boston hampers more than any other city the rightful advance of girls and lessens the refining influence on boys by this separation of the sexes."

In 1825 a High School for girls was opened in Boston. The city council appropriated \$2,000 for the experiment, but before the end of the second year the school became so popular, the pressure for admission was so great, and the expenditure which it threatened so alarming, that the school committee, under the lead of the mayor, Josiah Quincy, abandoned the project. The subject was not revived until 1848, when a separate High School for girls was established on a permanent basis. This school had a normal department and was in fact an outcome of the movement for improving the teaching service of the public schools. Here is a remarkable instance of an experiment in education so popular and so successful that it is abandoned by the

community for fear of the expense of maintenance, and is not revived until nearly a quarter of a century later, and then not for the good of the individual pupils to be educated but as a preparation for services to be rendered the community in the training of others. The idea that education at public expense is the birthright of boys and girls as prospective citizens of a civilization in which they must live and move and have their being is of more recent universal acceptance than one might suppose if he were acquainted only with existing conditions and knew nothing of the origin and establishment of such schools. Surely there has been wonderful progress in regard to public education, and well may we glory in a land and time in which education, the fullest and best, is urged upon every child without regard to parentage, or sex, or condition ; in which accidents of birth and fortune are not permitted to determine or preclude the development of individual endowment to fulness of efficiency.

The Boston system is no longer consciously prejudicial to either sex, but it must be apparent that it originated in the prejudices of a day when the education of girls was considered of little moment and a measure of questionable public policy, and that it is directly traceable to the vague fear that certain evils and dangers might arise from coeducation, although they had not been encountered in actual experience. Now, out of 628 cities Boston is one of twelve reporting separate public high schools. At the present time there are the Latin School, the English High School and the Mechanic Art School for boys, and the Latin School and the English High for girls, and the South Boston High School, and

the East Boston High School, and seven other schools, formerly suburban, for both boys and girls.

The sentiment and practice of the entire country are overwhelmingly in favor of coeducation, and it would seem a settled question, requiring neither argument nor further experiment for its decision, were it not necessary at times to reassert long established principles whose validity is questioned, and to set down in order the reasons drawn from psychology and experience on which such principles rest.

What, then, is coeducation in theory and practice?

It is education without discrimination or separation as to sex, under such restrictions as are imposed by considerations of morality and refinement and established social customs.

In practice this means for secondary schools—

(1) That the youth of both sexes are taught the same studies, by the same teachers, in the same rooms at the same time.

(2) That they study in the same rooms or in different rooms. That seems to me to be a matter of individual choice of school management.

(3) Their physical exercises are directed by one of their own sex in separate rooms, and are adapted to their respective physical characteristics and needs.

(4) That they meet and converse with each other naturally in the corridors and rooms when changing classes.

(5) That they lunch in separate rooms or in the same rooms, and at the same tables or at different tables as conditions suggest.

(6) That they form separate or combined musical and literary organizations with the counsel and advice and under the control of the principal and teachers co-operating with him.

(7) That they form separate athletic organizations with the approval and subject to regulations of the principal or faculty representative appointed by him.

(8) That they enjoy certain known and approved social occasions during the last year or two of their course.

Some of these features are local or transient and not at all essential to coeducation, which existed for a long time without them and is independent of them and not responsible for them, but they characterize coeducation in most of the large city high schools.

In the public schools separation of boys from girls or of boys or girls from other boys or girls whose course of study is different is unwise. This is the mistake made in the establishment of Manual Training High Schools or Commercial High Schools or Latin Schools or English High Schools. Such separation presupposes essential differences which do not exist between pupils of these schools, gives rise to false distinctions, emphasizes unduly certain studies, and overlooks the preponderant basal elements of similarity, predisposes young people to certain lines of activity for which they perhaps have no special aptitude, and greatly increases the cost of equipment. Far wiser and better is the plan which provides for all recognized branches of secondary study in fully equipped high schools in which students of all courses meet and mingle and com-

pare notes while pursuing special courses of study in some subjects and the same courses in most subjects, and so learn to estimate justly the value of the various studies and to recognize the possible avenues of activity while testing somewhat their own ability.

It is my observation, from more than thirty years' connection with a large city high school in which coeducation has been the constant plan, that sex distinctions are physical rather than intellectual and are not so predominant as some assert. Mind is sexless, though not uninfluenced by the physical nature.

It is easy to charge with lack of discernment those who fail to discover differences so essential as to require separate and special treatment of the sexes as such at the hands of teachers, but an adequate statement of these differences and of the methods of teaching that correspond to them had not been made. The mental differences observable between boys and girls are not greater or in fact so great as the differences between boys and boys. The plea for special treatment is insistent at this time, in keeping with the demand for individual instruction as opposed to class teaching, which is put forth as though some new discovery had been made or a new revelation of pedagogic truth had been received. Whereas the fact is that every successful teacher, and there have been many, has addressed himself successively to individuals in his classes, and the many composing the classes have learned while the individuals were taught, much more rapidly and thoroughly than they could have done with private instruction. Minds by contact and

attrition of other minds are made keener and quicker and more retentive. It is my experience that minds are not so different that a clear presentation of a subject is unintelligible to the individuals composing a class. It is hard to conceive of a number of pupils who have had similar training for a number of years and have reached the high school grade, as unable to profit to the full extent from a cogent presentation of a subject adapted to their stage of advancement. No two minds derive exactly the same impressions from subjects studied, but the margin of difference is after all small in comparison with the mass of resemblance.

How much of that which appears as sex differentiation is conventional and not natural, the result of past and present social customs, local prejudices, popular fallacies, ethnic ideals deeply rooted in the long buried past? The restraint of ages can not be forgotten or thrown off in a day. The little tot soon hears the mother's injunction, thenceforth to be repeated over and over again, "Be a little lady", "O, be a man". Line upon line, precept upon precept, here a little there a little, do not fail of their purpose in shaping the character of the boy and girl. We would not have it otherwise, for the hope of the race is bound up in the power of education, the educability of the young; but we must not mistake effect for cause, or cultivated differences for natural tendencies.

Overdrawn pictures of the bashfulness and timidity of boys in the presence of girls, of the listlessness and passivity and receptivity of girls, coupled with lack of initiative and originality, of sex tension and sex consciousness, and sexual distractions, my

experience as a pupil and observations as a teacher enable me to detect and correct. Given a mind imbued with a specific theory, and it will be strange indeed if it does not distort objects presented into shapes in keeping with the outlines of its dreams. The judicial attitude is far rarer than the feeling of prejudice, and the prejudiced mind is all unconscious of its limitations. While every teacher who studies his pupils learns their individual peculiarities, I doubt whether it would be practical to substitute for this knowledge any conception of sex differentiation. In so far as truth, because it is truth, is comprehensible by normal minds which must move logically, if at all, the sex of the pupil is a matter of comparative indifference. Prepare the girl for the house-wife's duties instead of for the fullest possible life and she may become wife and mother, physically speaking, but not the associate of the cultivated man, his companion in spiritual growth and intellectual advancement. Prepare her as a human being for continuous growth and abundant life, and whatever her state, she will not become an instance of arrested development. Motherhood, great its responsibilities, holy its office! but womanhood has still broader significance. Prepare for possible wife-hood and motherhood by preparing for womanhood in all the reaches of its spiritual power, and purity and loveliness. Just as you prepare for fatherhood by training every useful endowment for the perfection of complete manhood. The physiological aspect of fatherhood and motherhood are different, but the best preparation for either is the highest development of the whole being, physical, mental, moral, spiritual.

to be alone, but most normal men or college age covet an opportunity once in a while to meet each other as men under conditions in which they will not be overawed by the superior numbers or the superior brilliancy of women.

I remembered, while this discussion has been going on, of the satisfaction with which I sat one day at a table in the waiting room at Marshall Field's. That table was labeled, "This table is for men exclusively". I was not likely to be disturbed. And, Mr. President, I want to say that I will not take second place to any man in my admiration or regard for women, either. Man likes sometimes to be alone. Recognizing this fact, the college men of Northwestern University, faculty and students working together, undertook to find a solution. The women have their halls which afford a meeting ground for them and where centre their common interests as women in distinction from their interests as students. The first step taken by the men was to form a men's club and secure for themselves a building in which club rooms might be open at all times and where men's gatherings might be held at stated intervals. Here the men do their loafing without fear of molestation, but there is nothing distinctive in this. Other institutions have the same provisions and much more elaborately worked out. I mention it only to show the trend.

Our daily chapel service is held at noon. All students attend at least three-fifths of the time, unless they are specially excused. Men who are paying their own way by their own efforts and who need to be elsewhere at chapel time are freely excused with the result that from a hundred and fifty

ought to seek to discover and develop the powers of body and mind and spirit for fulness of life and efficiency of service, and unless it can be shown, as some assert, that such development can be secured best when boys and girls are separated altogether or during hours of recitation, I shall cling tenaciously to the system of coeducation which has resulted in the relatively exalted position accorded women in America as distinguished from all other lands, which has given us manly men, not less forceful and masculine, if gentler and more respectful of the claims of womanhood, which has not deprived womanhood of any or its charm or loveliness, or robbed it of delicacy or purity of action, thought, or imagination, while giving woman an opportunity for the development of intellectual vigor, independence of thought, and the spirit of scientific investigation, which has taught men and women rightly to esteem each other for the mental and moral endowments actually possessed rather than for imaginary gifts and graces and attributes of heart and head.

Professor Albion Small of the University of Chicago presented the Chicago University plan:

THE CHICAGO UNIVERSITY PLAN
PROFESSOR ALBION SMALL, UNIVERSITY OF CHICAGO,
CHICAGO, ILLINOIS

Coeducation at the University of Chicago is, in principle and in practice, an attempt to put at the disposal of both men and women, on perfectly equal terms, the best that the University affords. The attempt is mortgaged to no fetishes, either of tradition or of theory. We know that the needs of one man differ from those of another who would be put

In the general discussion engaged in Principal Armstrong spoke as follows :

One point spoken of, first, by Professor O'Shea in regard to ninety-five percent of the high schools being coeducational. We must bear in mind that that has reference to the complete separation of the schools into boys' schools and into girls' schools, and it does not contemplate nor consider at all this matter that has been presented by at least two of the papers of having separation during the early years of the high school, and that they should be together in all the social relations of the high school and separated only in the class room. Professor Jordan, in an article in which he replies to President Stanley Hall, admits that there is a problem in regard to the separation of the boys and girls in the early teens in the high school, but he declines to discuss that and confines himself to the discussion in the college.

There is no fear from deterioration of the scholarship of the girl. She has every advantage in that line.

In regard to the difference between the American and European woman, again it comes up in regard to the complete separation. In fact, it seems to me that all the opposition which has been raised to the segregation as we are considering it in some of the schools is simply the opposition to complete segregation, and I would be just as firm in my opposition to complete segregation as any of them.

I would like to emphasize the fact that the relations of young people in the high schools, the beneficial relations, all that which is claimed for coeducation, is the social rather than the intellectual. It is the parallelism that we are trying to find be-

er high school credits or pass examination for fifteen preparatory units. Everything in our Senior College is open to all students who have obtained eighteen majors of Junior College credit. Men or women who have passed their twenty-first birthday, but who cannot present credits for our regular requirements, may register as unclassified students in any courses for which they can show that they have had the necessary training. All men and women who hold a Bachelor's degree from a respectable college are admitted by that fact to the full privileges of our Graduate Schools. In case the preparatory and college work of persons admitted to the Graduate Schools on the strength of Bachelor's diplomas, appears to have fallen short of our requirements for the Bachelor's degree, the deficiency must be made up before admission to candidacy for a higher degree. In general then nothing except the ordinary proprieties of society draws lines between men and women in equal freedom of enjoying full liberties under these provisions at the University of Chicago.

There is a single departure from this rule. In our Junior College, we have virtually the group elective system. There are five distinct curricula, with a certain range of variation in each. After election of the group the studies for the freshman and sophomore years are in an extremely elastic sense of the term prescribed. Whenever the number of students in one of the courses thus required is sufficient to demand duplication of the work in the same quarter, the division is made on the line of sex, and the class rooms for men and for women are in buildings two blocks distant from each other. It should be added that the weekly chapel services for

the Junior College men are held on Mondays and for the women on Thursdays.

We have not entered upon a crusade to convince the world that this device constitutes a pedagogical cure-all. We have not even convinced *ourselves* that this is the case. Possibly it is not destined to be even a contribution to knowledge of the problem. It is not yet scientifically demonstrated that, on the subject of co-education, it is possible to change an opinion once formed. We are therefore content to use this device for what it is worth, simply because the majority of us believe it is on the whole, in our situation, expedient.

The reasons for this opinion may be reduced to two :—First over crowding of our class rooms made some sort of division necessary ; Second, in the judgment of the majority a sex division would be salutary, because we thought we detected in our particular circumstances a tendency to overstimulation of the social interests in the Junior College years.

There is not the remotest danger that any student in the University of Chicago will suffer atrophy of normal interest in the opposite sex because of this partial separation. The average boy or girl in our Junior College probably has better social opportunities than the average young person in Chicago enjoys outside the University.

The following statistics are worth what they are worth as an index of the relative prominence of the device described in the aggregate of our University life. For lack of a better word I use the term "segregation" in explaining the figures. In the Spring Quarter of 1906 the total registrations of

men in the University were 3098; of women 2713. Of this number 133 registrations of men, or 4. $\frac{1}{16}$ % and 115 registrations of women, also 4. $\frac{1}{16}$ %, were in "segregated" classes. These facts are presented analytically in the following table. The figures in parenthesis indicate the number of classes into which the registrants were divided.

SPRING QUARTER, 1906

	Men	Women
Latin.....	15 (1)	29 (1)
Romance	79 (4)	47 (2)
German	0	0
English,.....	39 (1)	39 (1)
	<hr/> 133 (4. $\frac{1}{16}$ %)	<hr/> 115 (4. $\frac{1}{16}$ %)

In the Autumn Quarter of 1906 the total registrations of men in the University were 3405; of women 2884. Of this number 601 registrations of men, or 17%, and 508 registrations of women, also 17%, were in "segregated" classes. The analytical table follows:

AUTUMN, 1906

	Men	Women
Pol. Sci.....	39 (1)	30 (1)
History.....	64 (2)	71 (2)
Latin.....	30 (2)	44 (2)
Romance	88 (3)	48 (3)
German.....	63 (4)	74 (4)
English.....	264 (5)	228 (5)
Math.....	53 (2)	13 (1)
	<hr/> 601 (17%)	<hr/> 508 (17%)

In the Winter Quarter of 1907 just closed, the total registrations of men in the University were 3501; of women 2785. Out of this number 806 registrations of men, or 8. $\frac{1}{16}$ %, and 217 registrations of women, or 7. $\frac{1}{16}$ %, were in "segregated" classes. The details are as follows:

MEMBERS OF THE EXECUTIVE COMMITTEE

Principal E. L. Harris, Central High School, Cleveland.

Dean J. V. Denny, Ohio State University.

Principal George W. Bennett, Shortridge High School, Indianapolis.

Dean A. E. Ross, State University of Missouri, Columbia.

And the President, the Secretary, and the Treasurer, *ex-officio*.

On motion the report was adopted and the persons nominated were declared elected.

The Secretary was instructed to ask for a report from the commercial department to be presented at the next meeting of the Association.

President Harris then called for President James, but not finding him present pronounced the work of the Association closed.

On motion the Association adjourned.

THOMAS ARKLE CLARK, Secretary.

understood by that term. In common, however, with other institutions of similar aim we have been giving attention recently to some of the problems that arise under the changed conditions incident upon the constant and rapid increase in the number of young women in co-educational schools. Whatever may be the reasons for this increase, which in most institutions is marked, certain it is that the conditions of co-education are quite different now from what they were twenty-five years ago or even ten years ago.

In most co-educational colleges the number of women now nearly equals the number of men if indeed it does not exceed it. This may not be a condition to be regretted, for none of us would deny to young women the best training that our best equipped colleges and universities afford, but that a new situation is presented must be recognized.

Education is in a large part social, and in co-education the social element is likely to assume undue proportions. The introduction of a few women into the men's colleges had a humanizing effect and was beneficial to both sexes ; but the greatest benefit to both sexes, in my judgment, accrues when the number of young women does not exceed fifty per cent, or thereabouts, of the number of men. With a preponderance of women the men are apt to be called upon to give too large a portion of their time and attention to social duties, or through gallantry and discretion, to withdraw from prominent part in student activities and surrender the field to the women who are their equals in the class room and their superiors in grace and attractiveness. They accept the theory that it is not good for man

to be alone, but most normal men or college age covet an opportunity once in a while to meet each other as men under conditions in which they will not be overawed by the superior numbers or the superior brilliancy of women.

I remembered, while this discussion has been going on, of the satisfaction with which I sat one day at a table in the waiting room at Marshall Field's. That table was labeled, "This table is for men exclusively". I was not likely to be disturbed. And, Mr. President, I want to say that I will not take second place to any man in my admiration or regard for women, either. Man likes sometimes to be alone. Recognizing this fact, the college men of Northwestern University, faculty and students working together, undertook to find a solution. The women have their halls which afford a meeting ground for them and where centre their common interests as women in distinction from their interests as students. The first step taken by the men was to form a men's club and secure for themselves a building in which club rooms might be open at all times and where men's gatherings might be held at stated intervals. Here the men do their loafing without fear of molestation, but there is nothing distinctive in this. Other institutions have the same provisions and much more elaborately worked out. I mention it only to show the trend.

Our daily chapel service is held at noon. All students attend at least three-fifths of the time, unless they are specially excused. Men who are paying their own way by their own efforts and who need to be elsewhere at chapel time are freely excused with the result that from a hundred and fifty

to two hundred men scarcely, if ever, appear at the service. This, added to the greater faithfulness of women in the performance of all perfunctory duties, gives an excess of women, in appearance at least, at the daily student gatherings. A natural consequence is that the service itself has a tendency to become a woman's service, not attractive to men, and to offset this tendency about a year ago we tried the experiment of holding chapel services for men and women separately on one day of each week. These separate services have been greatly enjoyed by the men but met with a mild protest at first from the women. I believe that these separate gatherings of men have been helpful in promoting a unity of feeling in matters that pertain to the development of the manly qualities. Whether or not this experiment could wisely be carried further I do not know, but the conditions and the results I think have justified it so far. We are not trying an experiment in separate education, but recognizing the fact that the manly qualities are different in many respects from the womanly qualities which should be cultivated, we are trying to afford an opportunity for the assertion of these in a proper and commendable way. The danger of co-education where it is accepted cordially and is at its best is not the masculinizing of the women but the feminizing of the men. Heretofore the greatest concern in co-education has been for the women. I think the time has come when more attention should be paid to the men.

fying to that effect. There is a balance of \$246.56
in the treasury.

W. W. BOYD,
G. W. BENTON,
FRANK HAMSHER.

On motion the report was adopted.

The committee on the time and place of the
next meeting reported as follows:

The committee on time and place recommend
that the next annual meeting of the Association be
held at the Auditorium Hotel, Chicago, the date to
be selected by the Executive Committee as near
the first day of April as may be practicable.

FREDERICK L. BLISS,
MARSHALL SNOW,
H. H. CULLY.

On motion the report was adopted.

The President announced the appointment of
the following as members of the Commission from
1907 to 1910:

President James H. Baker, University of Colorado, Boulder,
Colorado.

Professor A. S. Whitney, University of Michigan, Ann Arbor,
Michigan.

Professor F. G. Hubbard, University of Wisconsin, Madison,
Wisconsin.

Principal E. L. Harris, Central High School, Cleveland, Ohio.

The Committee on Nominations recommended
the names of the following officers for 1907-08:

FOR OFFICERS FOR THE YEAR 1907-1908

President, President E. J. James, University of Illinois.

Secretary, Dean T. A. Clark, University of Illinois.

Treasurer, Principal J. E. Armstrong, Englewood High School, Chicago.

VICE-PRESIDENTS

WISCONSIN

President G. L. Collie, Beloit College
State Superintendent C. P. Carey, Madison, Wisconsin

MICHIGAN

Professor W. R. Beman, University of Michigan
Principal F. L. Bliss, University School, Detroit, Michigan.

OHIO

President Emory W. Hunt, Denison University.
Principal Charles D. Everett, Columbus.

IOWA

President J. H. T. Main, Iowa College, Grinnell, Iowa.
Principal F. L. Smart, Davenport High School.

ILLINOIS

President Abram W. Harris, Northwestern University.
Professor Charles A. Bennett, Bradley Polytechnic Institute, Peoria.

MISSOURI

Dean C. M. Woodward, Washington University.
Principal Frank Hamsher, Smith Academy, St. Louis.

NEBRASKA

A. E. Reed, Inspector of Schools, University of Nebraska.
Principal A. H. Waterhouse, Omaha High School.

INDIANA

Professor C. A. Waldo, Purdue University, Lafayette.
Rev. W. O. Maloney, University of Notre Dame, Notre Dame.

KANSAS

Professor W. H. Johnson, University of Kansas.
Principal H. L. Miller, Topeka High School.

MINNESOTA

George B. Aiten, State Inspector of High Schools, Minneapolis.
Principal L. H. Beebe, Stillwater High School.

COLORADO

President James H. Baker, University of Colorado.
Principal W. H. Smiley, Denver High School.

OKLAHOMA

President David R. Boyd, State University.
L. W. Baxter, Superintendent of Instruction, Guthrie.

SOUTH DAKOTA

M. M. Rainer, Superintendent of Public Instruction, Pierre.
C. E. Swanson, Deputy State Superintendent, Pierre.

NORTH DAKOTA

President Webster Merrifield, State University.
W. L. Stockwell, State Superintendent of Public Instruction, Bismarck

Michigan Seminary, '06, Kalamazoo, President Gray.
High School, '06, Charlotte, Superintendent M. R. Parmelee.

INDIANA

Indiana University, c. m., Bloomington, President W. L. Bryan.
Wabash College, c. m., Crawfordsville, President (—)
High School, c. m., LaPorte, Superintendent J. W. Knight.
High School, '96, Fort Wayne, Principal C. F. Lane.
High School, '01, Lafayette, Superintendent E. Ayers.
Howe School, '04, Lima, Rector T. H. McKenzie.
Shortridge High School, c. m., Indianapolis, Principal G. W. Benton.
University of Notre Dame, '06, President John Cavanaugh.

ILLINOIS

University of Illinois, c. m., Urbana, President E. J. James.
University of Chicago, c. m., Chicago, President H. P. Judson.
Northwestern University, c. m., Evanston, President A. W. Harris.
Lake Forest College, c. m., Lake Forest, President (—)
Knox College, '96, Galesburg, President Thomas McClelland.
High School, c. m., Evanston, Principal W. F. Beardsley.
Evanston Academy of Northwestern University, c. m., Principal A. H. Wilde.
Morgan Park Academy, c. m., Morgan Park, Dean W. J. Chase.
Manual Training School, c. m., Chicago, Director H. H. Belfield.
Harvard School, c. m., Chicago, Principal John J. Schobinger.
Lake Forest School, Lake Forest, Head Master J. C. Sloan.
West Division High School, '96, Chicago, Principal C. M. Clayberg.
Hyde Park High School, '95, Chicago, Principal C. W. French.
Lake View High School, '96, Chicago, Principal B. F. Buck.
Englewood High School, '96, Chicago, Principal J. E. Armstrong.
Ottawa Tp. High School, '96, Ottawa, Principal J. O. Leslie.
Lyons Tp. High School, '96, LaGrange, Principal S. R. Cole.
Lewis Institute, '95, Chicago, Director G. N. Carman.
Streator Tp. High School, '97, Streator, Principal Ralph R. Upton.
Bradley Polytechnic Institute, '97, Peoria, Director T. C. Burgess.
High School, '98, Elgin, Principal W. S. Gable.
Lake High School, '99, Chicago, Principal Edward F. Stearns.
Marshall High School, '99, Chicago, Principal Louis J. Block.
West Aurora High School, Aurora, Principal C. P. Briggs.
Rock Island High School, Rock Island, Principal H. E. Brown.
New Trier High School, Principal F. L. Sims.
Kewanee High School, '04, Kewanee, Principal J. B. Cleveland.
LaSalle-Peru Tp. High School, '05, Principal T. J. McCormack.
East Side High School, '05, Aurora, Principal C. L. Phelps.
Township High School, '05, Joliet, Principal J. Stanley Brown.

J. Sterling Morton High School, '05, Clyde, Principal H. O. Church.
Township High School, '06, Sterling, Principal E. T. Austin.
Rockford College, '06, Rockford, President Julia Gulliver.
High School of the University of Chicago, '06, Principal W. B. Owen.

WISCONSIN

University of Wisconsin, c. m., Madison, President Charles R. Van
Hise.
Beloit College, c. m., Beloit, President Edward D. Eaton.
Ripon College, '04, President Richard C. Hughes.
Milwaukee-Downer College, '97, Milwaukee, President Ellen C. Sabin.
Milwaukee Academy, '97, Milwaukee, Principal J. H. Pratt.
Racine High School, '05, Racine, Principal E. W. Blackhurst.
West Division High School, '04, Milwaukee, Principal C. E. McLene-
gan.
North Division High School, '04, Milwaukee, Principal R. E. Krug.
Lawrence University, '05, Appleton, President Samuel Plantz.
South Division High School, '06, Milwaukee, Principal E. Rissman.
Wayland Academy, '06, Beaver Dam, Principal E. P. Brown.
East Division High School, '07, Principal George A. Chamberlain.

MINNESOTA

Humboldt High School, St. Paul, Principal H. S. Baker.
Central High School, '04, St. Paul, Principal E. V. Robinson.
Cleveland High School, St. Paul, Principal S. A. Farnsworth.
Carlton College, '06, Northfield, President W. H. Sallmon.

IOWA

State University of Iowa, c. m., Iowa City, President Geo. E. Mac
Lean.
Cornell College, c. m., Mt. Vernon, President Wm. F. King.
State Normal School, c. m., Cedar Falls, President D. S. Wright.
Iowa College, '95, Grinnell, President J. H. T. Main.
Drake University, '06, Des Moines, President H. M. Ball.
High School, '06, Council Bluffs, Principal S. L. Thomas.
High School, '06, Dubuque, Principal F. L. Smart.
West High School, '06, Des Moines, Principal W. A. Crusinberry.
Simpson College, '06, Indianola, President Charles E. Shelton.

MISSOURI.

University of Missouri, c. m., Columbia, President Richard H. Jesse.
Washington University, c. m., St. Louis, Chancellor Winfield S. Chaplin.
Drury College, '98, Springfield, President Homer T. Fuller.
Missouri Valley College, '98, Marshall, President Wm. H. Black.
High School, '96, St. Louis, Principal W. J. S. Bryan.

Westminster College, '00, Fulton, President David R. Kerr.
Mexico High School, Mexico, Superintendent D. A. McMillan.
Manual Training High School, '00, Kansas City.
Mary Institute, '00, St. Louis, Principal E. H. Sears.
Kirkwood High School, '00, Kirkwood, Superintendent R.G. Kinkead.
Park College, '02, Parkville, President Lowell M. McAfee.
Academy of Drury College, '04, Springfield, Principal C. P. Howland.
Wm. McKinley High School St. Louis, '05, Principal G. B. Morrison.

NEBRASKA.

University of Nebraska, '96, Lincoln, President E. Benj. Andrews.

KANSAS.

University of Kansas, '96, Lawrence, Chancellor Frank Strong.
Washburn College, '06, Topeka, President Norman Plass.

COLORADO.

University of Colorado, '96, Boulder, President Jas. H. Baker.
Colorado College, '96, Colorado Springs, President W. F. Slocum.
High School No. 1, '96, Denver, President Wm. H. Smiley.
The Miss Wolcott School, '06, Denver.

OKLAHOMA

University of Oklahoma, '01, Norman, President David R. Boyd.

SOUTH DAKOTA.

High School, Yankton, Principal R. C. Shellenbarger.
High School, Aberdeen, '07, Principal W. L. Cochrane, Aberdeen.

INDIVIDUAL MEMBERS

OHIO

Charles S. Howe, '02, President of Case School of Applied Science,
Cleveland.
Jos. V. Denney, '03, Dean of the College of Arts, Philosophy and Sci-
ence, Ohio State University, Columbus.
W. W. Boyd, '03, High School Visitor, Ohio State University, Colum-
bus.
D. R. Major, '04, Professor in Ohio State University, Columbus.
G. M. Jones, '05, Secretary of Oberlin College, Oberlin.
F. C. Hicks, '06, Professor in the University of Cincinnati, Cincinnati.
F. W. Ballou, High School Inspector, University of Cincinnati, Cin-
cinnati.

MICHIGAN

- Fred N. Scott, '98, Professor in the University of Michigan, Ann Arbor.
L. H. Jones, '95, President of the State Normal School, Ypsilanti.
A. S. Whitney, '03, High School Inspector, University of Michigan,
Ann Arbor.
W. W. Beman, '95, University of Michigan, Ann Arbor.
Wm. A. Greeson, '97, Superintendent of Schools, Grand Rapids.

INDIANA

- Clarence A. Waldo, '95, Professor in Purdue University, Lafayette.
Carl Leo Mees, '96, President of Rose Polytechnic, Terre Haute.
W. W. Parsons, '99, President of the State Normal School, Terre Haute.
T. F. Moran, '02, Professor in Purdue University, Lafayette.
E. O. Holland, '06, High School Inspector, Indiana University,
Bloomington.

ILLINOIS

- S. A. Forbes, '95, Professor, University of Illinois, Champaign.
A. V. E. Young, '95, Professor in Northwestern University, Evanston.
Thomas C. Chamberlin, '95, Professor in the University of Chicago,
Chicago.
Henry P. Judson, '85, Professor in the University of Chicago, Chicago.
Marion Talbot, '97, Dean of Women, University of Chicago, Chicago.
F. W. Gunsaulus, '98, President of Armour Institute, Chicago.
Thomas F. Holgate, '99, Professor in Northwestern University, Evans-
ton.
J. A. James, '99, Professor in Northwestern University, Evanston.
A. F. Nightingale, c. m., County Superintendent, 1997 Sheridan Road,
Chicago.
R. E. Hieronymus, '03, President of Eureka College, Eureka.
H. A. Hollister, '03, High School Inspector, University of Illinois,
Champaign.
E. G. Cooley, '04, Superintendent of Schools, Chicago.
H. F. Fisk, '05, Professor in Northwestern University, Evanston.
Walter Libby, High School Inspector, Northwestern University,
Evanston.
F. J. Miller, '06, High School Inspector, University of Chicago.
Nathaniel Butler, '06, Professor in the University of Chicago.
T. A. Clark, '06, Dean of Undergraduates, University of Illinois, Ur-
bana.
E. J. Townsend, '07, Professor in University of Illinois, Champaign.

WISCONSIN

- Edward A. Birge, '96, Professor in the University of Wisconsin, Madi-
son.

M. V. O'Shea, '98, Professor in the University of Wisconsin, Madison.
A. W. Treessler, '03, High School Inspector, University of Wisconsin,
Madison.

H. L. Terry, '06, State High School Inspector, Madison.
W. O. Carrier, '06, President of Carroll College, Waukesha.

MINNESOTA

George B. Aiton, '97, State Inspector of High Schools, Minneapolis.

IOWA

F. C. Ensign, '06, High School Inspector, State University, Iowa City.
Charles E. Shelton, '06, President of Simpson College, Indianola.

MISSOURI

F. Louis Soldan, '00, Superintendent of Schools, St. Louis.
John R. Kirk, '98, President of the State Normal School, Kirksville.
C. M. Woodward, '98, Professor in Washington University, St. Louis.
A. Ross Hill, '04, Dean of Teachers' College, University of Missouri,
Columbia.
Joseph D. Elliff, '05, High School Inspector, University of Missouri,
Columbia.

NEBRASKA

J. W. Crabtree, '04, University of Nebraska, Lincoln.
A. A. Reed, '07, High School Inspector, University of Nebraska, Lincoln.

KANSAS

W. H. Johnson, '06, High School Inspector, University of Kansas,
Lawrence.

COLORADO

H. G. J. Coleman, High School Inspector, University of Colorado,
Boulder.

SOUTH DAKOTA

M. M. Ramer, '06, State Superintendent of Public Instruction, Pierre.
C. E. Swanson, Assistant State Superintendent of Public Instruction,
Pierre.

NORTH DAKOTA

Webster Merrifield, '07, President, University of North Dakota, Grand
Forks.

CONSTITUTION OF THE NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS.

**AS AMENDED AT THE NINTH ANNUAL MEETING
MARCH 26, 1904.**

ARTICLE I.

NAME.

The name of this Association shall be the North Central Association of Colleges and Secondary Schools.

ARTICLE II.

OBJECT.

The object of the Association shall be to establish closer relations between the colleges and secondary schools of the North Central States.

ARTICLE III.

MEMBERSHIP.

Section 1.—The members of the Association shall consist of the following two classes: First, colleges and universities, and secondary schools. Secondly, individuals identified with educational work within the limits of the Association.

Sec. 2.—Election to membership shall require a two-thirds vote of the members present at any meeting, and shall be made only upon the nomination of the Executive Committee.

Sec. 3.—In the membership of the Association, the representation of higher and of secondary education shall be as nearly equal as possible.

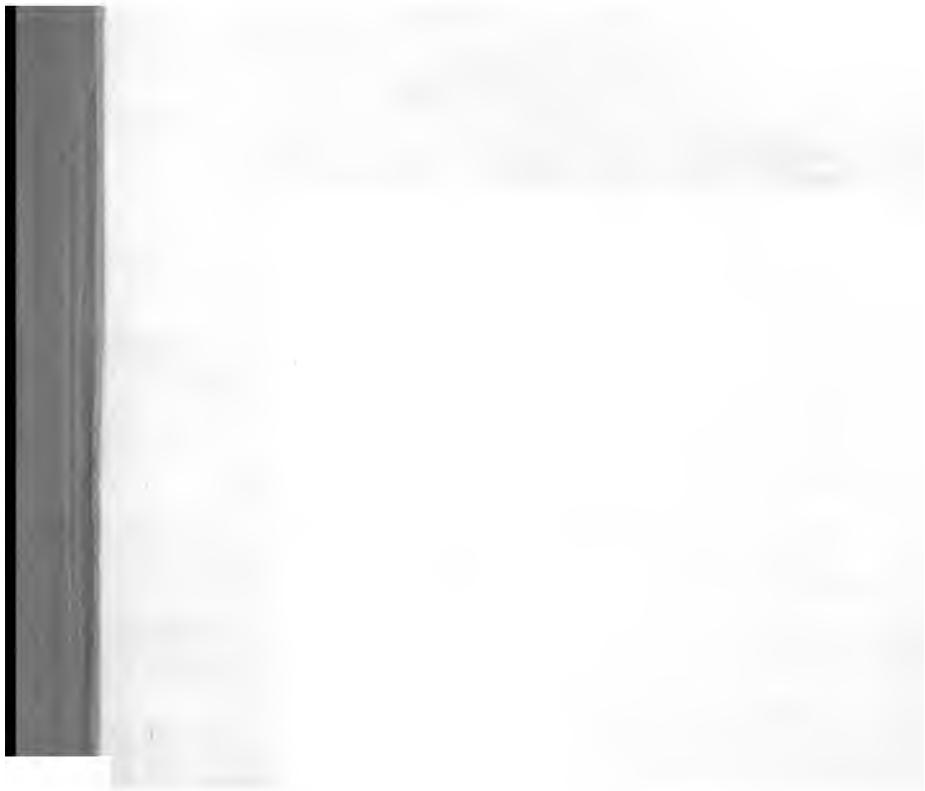
Sec. 4.—An institutional member shall be represented at the meeting of the Association by its executive head, or by some one designated by him in credentials addressed to the secretary.

Sec. 5.—No college or university shall be eligible to membership

REGISTRATION

- Armstrong, J. E., Principal, Englewood High, Chicago, Illinois.
Bailey, Charles H., Professor, Iowa State Normal School, Cedar Falls, Iowa.
Ballou, Frank W., Director of School of Affiliation, University of Cincinnati, Cincinnati, Ohio.
Bardwell, C. M., Principal East Side High, Aurora, Illinois.
Beeler, L. H., Principal, Stillwater, Minnesota.
Belfield, H. H., Principal, The University High, Chicago, Illinois.
Bell, Hill M., President, Drake University, Des Moines, Iowa.
Beman, Wooster W., Professor, University, Ann Arbor, Michigan.
Bennett, Charles A., Professor, Bradley Polytechnic Institute, Peoria, Illinois.
Benton, George W., Principal, Shortridge High, Indianapolis, Indiana.
Benton, Guy Rolled, President, Miami University, Oxford, Ohio.
Bliss, Frederick L., University School, Detroit, Michigan.
Boyd, W. W., Inspector, Ohio State University, Columbus, Ohio.
Briggs, C. P., Principal, West Aurora High, Aurora, Illinois.
Brown, H. E., Principal, Rock Island, Illinois.
Brumbaugh, E. V., Principal, Marshalltown, Iowa.
Bryan, W. J. S., Principal, Central High, St. Louis, Missouri.
Bryan, Mrs. W. J. S., St. Louis, Missouri.
Buswell, Clara L., Principal, Polo, Illinois.
Butler, Nathaniel, Professor, University of Chicago, Chicago, Illinois.
Cable, J. E., Principal, Thornton Township High, Harvey, Illinois.
Caldwell, Otis M., Professor, State Normal School, Charleston, Illinois.
Carman, G. N., Director, Lewis Institute, Chicago, Illinois.
Cary, C. P., State Superintendent of Schools, Madison, Wisconsin.
Chase, Wayland J., Dean, Morgan Park Academy, Morgan Park, Illinois.
Clark, Thomas Arkle, Dean, University of Illinois, Urbana, Illinois.
Cochrane, W. L., Superintendent, Aberdeen, South Dakota.
Collie, G. L., Dean, Beloit College, Beloit, Wisconsin.
Comstock, Clarence E., Professor, Bradley Polytechnic Institute, Peoria, Illinois.
Cooley, E. G., Superintendent of Schools, Chicago, Illinois.
Cully, H. H., Principal, Glenville High, Cleveland, Ohio.

Denney, J. V., Dean, Ohio State University, Columbus, Ohio.
Dexter, Edwin C., Professor, University of Illinois, Urbana, Illinois.
Ehrman, S. W., Principal, Decatur, Illinois.
Elliff, J. B., Inspector, Columbia, Missouri.
Elson, W. H., Superintendent, Cleveland, Ohio.
Ensign, Forrest C., Professor and Inspector, Iowa State University,
Iowa City, Iowa.
Evans, W. A., Chicago, Illinois.
Everett, Charles D., Principal, North High, Columbus, Ohio.
Fox, Elizabeth H., North High, Minneapolis, Minnesota.
Fox, Fred Gates, Clyde Township High, Chicago, Illinois.
Fox, Miss Jennie L., Lincoln High, Lincoln, Nebraska.
Freer, H. H., Dean, Cornell College, Mt. Vernon, Iowa.
Garrett, W. H., Professor, Baker University, Baldwin, Kansas.
Giles, F. M., Principal, DeKalb, Illinois.
Griffith, H. E., Professor, Knox College, Galesburg, Illinois.
Grover, Olive Lothrop, New Trier Township High, Kenilworth, Illinois.
Haddock, Frank D., Superintendent, Champaign, Illinois.
Hall, Arthur G., Professor, Miami University, Oxford, Ohio.
Halsey, John J., Professor, Lake Forest College, Lake Forest, Illinois.
Hamsher, Frank, Principal, Smith Academy, St Louis, Missouri.
Harker, Joseph R., President, Illinois Woman's College, Jacksonville,
Illinois.
Harris, Abram Winegardner, President, Northwestern University,
Evanston, Illinois.
Harris, Mrs. Edward L., Cleveland, Ohio.
Harris, Edward L., Principal, Central High, Cleveland, Ohio
Hill, A. Ross, Dean, University of Missouri, Columbia, Missouri.
Holgate, Thomas F., Dean Northwestern University, Evanston, Illinois.
Holland, E. O., Professor, Indiana University, Bloomington, Indiana.
Hilliester, H. A., Inspector, University of Illinois, Champaign, Illinois.
Hubbard, F. G., Professor, University of Wisconsin, Madison, Wisconsin.
Hughes, Richard C., President, Ripon College, Ripon, Wisconsin.
Hundley, H. Rhodes, Dean, Doane Academy, Granville, Ohio.
Hunt, Emory W., President, Denison University, Granville, Ohio.
James, Edmund J., President, University of Illinois, Urbana, Illinois.
James, J. A., Professor, Northwestern University, Evanston, Illinois.
Johnson, Franklin W., Principal, Morgan Park Academy, Morgan
Park, Illinois.
Johnson, W. H., Inspector, University, Lawrence, Kansas.
Jones, Florence N., Instructor, University of Illinois, Urbana, Illinois
Jones, George M., Secretary, Oberlin College, Oberlin, Ohio.
Judson, Harry Pratt, University of Chicago, Chicago, Illinois.





Stanford University Libraries



3 6105 007 933 182

LBRARY OF CONGRESS

